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WELLAND COUNTY HISTORICAL SOCIETY

PAPERS AND RECORDS, VOL. II

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WELLAND COUNTY HISTORICAL SOCIETY

PAPERS AND RECORDS VOL. II

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Note.—The foregoing papers have been read at meetings of the Society, with the exception of two, which have been included because they seemed to throw additional and valuable light on the topics under discussion.

Four papers read to the society are not included for the reason that they are to be issued in the forthcoming publication of the "Papers and Records of the Ontario Historical Society," and will thus be available to the public.

BIBLIOGRAPHY OF THE FENIAN RAID

Somerville—*Narrative of the Fenian Invasion of Canada.*

Campbell—*The Fenian Invasions of Canada of 1866 and 1870*

Dent—*Last Forty Years, Correspondence Relating to the Fenian Invasion Ottawa 1869.*

Trials of the Fenian Prisoners at Toronto Who Were Captured at Fort Erie C.W. in June 1866. Ed. by George R. Gregg and E. P. Roden

McMicken—*Fenian Raid on Manitoba* (Manitoba Hist. and Sc. Society), 1888

Hannay—*History of New Brunswick.*

Macdonald—*Troublous Times in Canada*

Denison—*Soldiering in Canada and The Fenian Raid at Fort Erie*

Stephen Beatty—*Fenian Raid 1866*, St. Catharines, 1910

PUBLICATIONS OF
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Vol. I. 1924—The Centenary of the Welland Canal.

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THE FENIAN RAID OF 1866

By General E. A. Cruikshank, LL.D., F.R.S.C.
F.R.Hist.S.

After the lapse of nearly sixty years, the Fenian invasion of Canada in 1866 seems a supremely foolish adventure, doomed to inevitable failure, and it is difficult to recall the alarm, excitement, and bitter controversies which followed. Few lives were lost and little damage was done to property, but some useful lessons may yet be drawn from the events of that time.

The Fenian conspiracy grew out of the Young Ireland agitation of 1848. James Stephens, its acknowledged founder, had been implicated in the abortive insurrection organized by William Smith O'Brien and was slightly wounded in an encounter with the Constabulary, but escaped to France where he lived quietly for seven or eight years. Some time in 1857 he was solicited by John O'Mahony and other fellow conspirators who had taken refuge in the United States and prospered, to undertake the management of a new revolutionary movement in Ireland for the support of which they promised to supply all the necessary money. Indeed, one of these fugitives had in fact written enthusiastically from New York not very long after his arrival in that city, declaring that "we have the long arm of the lever over here." This was the poet and orator, Thomas D'Arcy Magee, who soon went to Canada and entered political life, but in the course of a few years saw reason to change his opinions materially. Stephens, who at that time needed money badly, went to Ireland and set to work with a will during the following year, when he began to form secret military societies or associations consisting generally of from fifty to one hundred and fifty members each, to which he gave the name of "Fenian Circles." Tradition relates that the ancient militia of

Ireland were styled "Fenians." Sir Walter Scott in the "Antiquary" refers to "the bare-armed Fenians," and the conspirators thought that they had hit upon a good name at last. The chief of each "circle" was known as its "centre." The officers next in rank were designated by the letters "A," "B," "C," &c. All authority for the time being was vested in the "centre," and in the event of his death or absence his next subordinate succeeded automatically to his place and authority. The ordinary members took a solemn oath to obey orders only and knew scarcely anything of the plans of their leaders. By such precautions it was hoped that it would not be possible for them to betray or reveal their projects prematurely as had so often been the case in the past. Military exercises were frequently practised in many places and so large a proportion of the militia regiments were known to be enrolled in these circles that the government deemed it expedient to disband them in several of the southern and western counties. The Fenian organization spread rapidly to the United States, Canada and Australia. In the City of New York particularly it soon became very strong and practically gained control of its municipal government. A mayor of the city distinguished himself by ordering the green flag bearing the harp without the crown to be flown over the city hall on St. Patrick's Day and attired himself in green clothing on that anniversary to proclaim his sympathy with the Fenian movement in the most significant manner. Large sums of money were collected for the promotion of the conspiracy amounting, it was affirmed, to more than a million of dollars within seven years in the United States alone, of which, however, Stephens admitted that he had received no more than $50,000, and it was presumed that the balance had been expended by the self-appointed leaders in that country to support themselves in luxurious indolence.

Irishmen were encouraged to join the Federal army in the civil war to acquire military knowledge and experience and many exclusively Irish regiments were recruited. One of these, the 69th New York, was commanded by Michael Corcoran, an active Fenian, who had been a policeman but later became a saloon-keeper in the city of New York. Corcoran was taken prisoner in the first battle of Bull Run and, after being exchanged, was promoted to command a brigade. Thomas Francis Meagher, popularly known

in the rebellion of '48 as "Meagher of the sword," also commanded a distinctively "Irish Brigade." Under such favourable auspices Fenianism naturally flourished in the United States and spread through the armies of the North.

The controversy with Great Britain caused by the detention of the Trent and the arrest of the Confederate envoys on board was regarded by the Fenian leaders as giving them a favourable opportunity for beginning a public demonstration, and a meeting was held in the Rotunda in Dublin, which was well attended, and resolutions of sympathy with the United States were adopted.

In 1861 Stephens reported to his colleagues that fifty thousand men had been enrolled in Ireland and the funeral of Terence Bellew McManus, one of the leading insurgents in '48, who had died in California but was brought back to Cork for burial, was made the excuse for another immense popular demonstration. Next year he began the publication of a newspaper called the "Irish People," which soon obtained a wide circulation. A provisional government had already been organized with offices in Union Square, New York, and in the winter of 1863-4, a general convention was held in Chicago, at which Colonel John O'Mahony was elected President of the Irish Republican Brotherhood. He had attended Trinity College, Dublin, and was a fluent and effective speaker. Like Stephens, Meagher, McGee and others, he had been associated with Smith O'Brien in the rising of '48. His military rank was derived from his temporary command of a regiment of New York volunteers in the civil war. Subsequently an "Irish Fair" was organized in Chicago, which Stephens visited and was welcomed with boisterous enthusiasm as the "Chief Organizer of the Irish Republic." An official report presented to him at this time stated that 613 Fenian "circles" had been formed in America, eighty of which were located in the British provinces.

About the same time O'Mahony visited Montreal and was entertained at a dinner, where violently seditious speeches were warmly applauded. This provoked an open letter from McGee, then a member of parliament for one of the divisions of the city and lately President of the Council in Sandfield Macdonald's cabinet. It was addressed to the Irishmen of Montreal, warning them to have nothing to do with American agitators and Fenianism, which

he described as "a mere will-of-the-wisp and a delusion." O'Mahony promptly retorted by denouncing McGee as "a Judas" and "a traitor" to the professions of his youth, to which McGee retorted by a scornful reference to O'Mahony as "a crackbrained enthusiast who has already been twice confined in a lunatic asylum."

A second large convention of Fenians was held at Cincinnati in January, 1865, which was reported to have been attended by 2700 delegates. A constitution for an Irish Republic was formally adopted. O'Mahony was re-elected President and the convention then proceeded to elect a Senate and Secretaries of State, War and Finance. An issue of government bonds was authorized and a military council was appointed, of which Brigadier General McRurry of the United States Volunteers was named as chairman. In April of that year the civil war was ended and within a short time nearly a million of soldiers were discharged from military employment. The labour market was at once greatly congested. Two confidential agents, of whom one was P. J. Meehan, editor of the "Irish World" of New York, were sent to Ireland to arrange with Stephens for an immediate insurrection, in which they expected to obtain the assistance of many of these disbanded soldiers. Some of the Fenian leaders openly boasted that their officers were on their way to Ireland to raise an army to achieve its independence and asserted that two hundred thousand Irishmen had fought in the Federal armies, of whom a large number were sworn Fenians, who could be relied on to assist them. It was observed that almost every ship arriving in the Irish ports from the United States landed a number of mysterious strangers of a military appearance, who quietly made their way inland. But the government had reliable sources of information from which they learned all that was going on. A well-informed Irish writer, who cannot be suspected of any unfriendly bias, relates that "every considerable gathering of Fenians had among its members at least one person who generally professed a yet fiercer devotion to the cause than any of the rest and who was in the habit of carrying to Dublin Castle every night his official report of what his Fenian colleagues were doing." Be that as it may, soon after his arrival Meehan lost an important letter addressed by O'Mahony to Stephens as "chief organizer," which soon came into the hands of the police

On the night of September 15 the office of the "Irish People" was raided, its editors were arrested, and many incriminating documents were seized. Stephens evaded arrest until 11 November 1865, when he was taken at his lodgings in the suburbs of Dublin. Two weeks later it was announced that he had escaped from Richmond prison, and after remaining in hiding for several weeks, he got away to France.

Meanwhile the organization in America had been daily growing stronger and its leaders were literally forced to undertake some enterprise to satisfy the clamour of the rank and file. Ireland was far away and strongly garrisoned. To promote an insurrection was a difficult and dangerous affair. The British Provinces were close at hand and comparatively defenceless. Many of their inhabitants were supposed to be discontented with their government, and it was confidently anticipated that, with the possible exception of the fortress of Quebec, the whole of Canada could be taken in a single short and almost bloodless campaign. The Fenian "circles" in Toronto and Montreal were reported to be particularly strong and zealous. McDermott, the "centre" of a New York "circle," announced that he had attended an open air meeting of Fenians in Queen's Park, Toronto, on the evening of 5 November 1864, at which rebellion had been openly advocated and that the authorities had not dared to interfere because they knew that 800 men in the city were fully armed and in readiness to protect the speakers. If five thousand men invaded western Canada, he declared, the people would rise in a body and demand annexation to the United States. A large number of Fenians soon pronounced themselves in favour of such an invasion and O'Mahony incurred much unpopularity by refusing his sanction to the move. Finally, when he undertook to place the bonds of the Irish Republic on the market, he was summarily deposed by the "Senate" and Colonel William R. Roberts, who was known to favour it, was elected in his place.

The new President lost no time in announcing his policy. "Let us march on the frontier," he said. "The Government of Canada is imbecile. Ottawa, the capital city, can easily be taken by a handful of Fenians, who can throw up works and hold it against any force the Canadian Government is prepared to send

against them until reinforced. What a thrilling effect such an achievement would have throughout Europe! We must go to Canada and fight it out there. The war has commenced in Ireland; the Fenians must follow it up here and hit England in a tender spot." Colonel Sweeney, his Secretary of War, published a circular urging an effective military organization and promising "deeds, not words."

But O'Mahony was still powerful, and at the general convention held in January, 1866, he was triumphantly re-elected President by a great majority over Roberts. His rival, however, refused to submit to this decision and proceeded to make a tour of the cities on the great lakes. He addressed large and enthusiastic gatherings in Buffalo, Cleveland, Detroit, and Chicago, while Sweeney, his chief lieutenant, had a like favourable reception at meetings held in New York, Troy, Burlington, Philadelphia, and St. Louis. They announced that subscriptions were pouring in at the rate of $15,000 a day and that the time for action was near. It was stated that three regiments were drilling every night at Buffalo and that arms and munitions were being rapidly accumulated in that city for their use.

Their grandiose plan of campaign still sounds impressive:

> "Detroit, Rochester, Plattsburg, and Portland are appointed rendezvous for the troops, and the forces at Detroit and Rochester are to attack Hamilton and London, while other forces are to move from Ogdensburg and Plattsburg upon Montreal. When the Canadian borders are once crossed, bases of operation will be established in the enemy's country so that international quarrels with Washington may be avoided. It is expected to have a million and a half dollars of ready cash to give transportation for thirty thousand men for one month. Of this force, eight thousand will carry the line of the Grand Trunk west of Hamilton, while five thousand will cross from Rochester to Cobourg prepared to move east or west as the [illegible] assist the three thousand who will cross at Wolfe Island to Kingston to take part with the western detachment in capturing Toronto. This campaign, it is thought, will occupy two weeks. Thus entrenched securely in Upper Canada, holding all the lines of the Grand Trunk Railway with sufficient rolling stock secured to control the said lines, the Fenians hope to summon to their colors fifty thousand American Irishmen and equip a navy on Lakes Huron, Erie and Ontario. This having been accomplished, thirty thousand men, under General Sweeney, will move

down the St. Lawrence upon Kingston simultaneously with ten thousand by the line of Chambly, and these will converge upon Montreal."

It was at the same time asserted that an officer of high rank in the army of the United States had offered to lead the army of invasion and the name of the distinguished Confederate General Fitz-Hugh Lee, was also mentioned in this connection.

Such an extensive scheme of aggression naturally caused much alarm in Canada as there could no longer be any doubt of the formidable character of the organization. For nearly a year three provisional battalions of volunteer infantry had been stationed in small detachments at posts along the Detroit, Niagara and St. Lawrence Rivers. On the 7th of March, 1866, the Executive Council of Canada decided to call into active service for an indefinite period an additional force of ten thousand volunteers, which was accordingly done that day by telegraph and responded to with gratifying alacrity.

By that time O'Mahony had been induced to modify his views sufficiently to sanction an expedition to take possession of the island of Campo Bello in Passamaquoddy Bay, which, being then claimed by both Great Britain and the United States, he professed to consider as neutral territory and might be occupied by a Fenian force as a base for future operations without provoking hostilities with either power. The treasurer of his wing of the Brotherhood, B. Doran Killian, was put in charge of this enterprise, which resulted in a complete and ridiculous failure, attended with much privation and suffering among his deluded followers. This "fizzle," as it was called by the newspapers, had the effect of lulling the apprehensions of the Canadian ministry, who were at the same time seized by a sudden fit of economy, and by an order of 12 April 1866 the whole of the volunteer force lately embodied was relieved from duty and the Militia Department even refused to approve the employment of a guard for the field guns of the Welland Battery, which were in consequence removed to Hamilton for safety.

Hon. T. D. McGee continued fearlessly to assail with ridicule "the farcical Irish Republic of Manhattan Island with an escaped lunatic for its President and its Senate, composed of a shoemaker from Massachusetts, a dealer in second-hand goods from New

York, a plumber from Rhode Island, a dandy dealer from Illinois and such like men from other States. "This Billingsgate beldame reeling and dishevelled from the purlieus of New York with blasphemy on her lips and all uncleanness in her breast," he exclaimed with florid rhetoric, "this shameless impostor I regard with scorn and detestation." About the same time O'Mahony announced that he had received letters from Canadian "circles" protesting against any Fenian invasion of Canada.

On May 10, James Stephens arrived at New York from Paris. O'Mahony at once tendered him his resignation of his office as President, but Roberts declined to follow his example. On the 15th an immense outdoor meeting was held at Jones's Wood, at which more than sixty Fenian "circles" proudly paraded with bands and banners. Among the celebrities who came there to welcome the renowned "Chief Organizer" were Major-General Joseph Hooker, formerly in command of the Federal Army of the Potomac, Brigadier-General Ruggles, and Colonel Reilly of the United States regular army. Stephens told his hearers that the "circles" in Ireland numbered two hundred thousand members, of whom fifty thousand were well trained in military exercises.

For several years both the British and Canadian governments had employed secret agents to collect information in various parts of the United States, one of whom, as is now known, was the noted "Major Le Caron," who constantly made full reports. The movements of the Fenians could not elude the observation of enterprising correspondents of the daily newspapers. On May 17 a despatch from Nashville in Tennessee, dated the day before, was published in many papers in the United States, announcing that more than a thousand dollars had been invested that day in Fenian bonds and that several parties had left the city for the northern frontier. On May 29, the *Cincinnati Commercial* said: "There is a movement of Fenians now going on. Quite a number of them left the city yesterday bound for Canada. Large shipments of arms have been made northward within a few days. There is an opinion that an extensive raid is to be made upon Canada. Movements of men and transportation of arms have been in progress for several days with a degree of secrecy that indicates business." On the same day a despatch sent out from Cleveland, Ohio, stated

that: "Three or four hundred Fenians, partially armed and carrying colors, officered by men with sidearms, passed here last night. They were orderly and quiet and claimed to be marching to California to work on the railroads." Commenting on these reports in an editorial on May 30, the *Buffalo Courier* said that the knowing ones in the "Brotherhood" there, laughed at them and declared that the whole story was a hoax, but added that they were "a shrewd set" and "people might wake up some bright morning to find that Canada had been invaded or captured, but the Canadian Johnnie Bulls are not frightened this time and the frontier does not bristle with bayonets." On the same morning the *New York Herald* announced that Mayor Wells of Buffalo had telegraphed to the Mayor of Hamilton in Canada, that six hundred Fenians had left Cleveland for Buffalo, and that the spare rolling stock of the Great Western Railway was being sent away from Hamilton in consequence. The manager of that railway, however, made a written denial of that statement as soon as it was brought to his notice. In the course of the last day of May many inhabitants of Buffalo observed that considerable parties of strangers, whom they supposed to be Fenians, had arrived in that city on the two preceding days. They had come in bands or parties of varying numbers, mainly from the south and west and kept together as they strolled about the streets. When questioned, some of them stated that they were going to Canada to look for work on the railroads, while others said they were discharged soldiers on their way to California, which seemed scarcely credible, as it was known that they had come from Cleveland and Cincinnati or even from Indianapolis and Chicago. Mr. H. W. Hemans, the British Consul, telegraphed this information that afternoon to Major-General Napier, who was in command of the First Military District of Canada, having his headquarters at Toronto.

At least one Fenian regiment, designated as the "Buffalo 7th Regiment, Irish Army of Liberation," had been organized in that city and was formally presented with a battle-flag by a group of women who sympathized with the cause early in May. There is little doubt that the parties, who came from a distance, were warmly welcomed and well taken care of by their friends living in Buffalo, who were many and some of them prosperous and influen-

cal in politics. The *Buffalo Express*, whose proprietor was of English birth, had published accounts, with large headlines, of the assembling of a large body of Fenians in Buffalo, which were consistently ignored or even ridiculed by its rival, *The Commercial Advertiser*, recognized as the local organ of the Federal Government. On the streets of Fort Erie that afternoon and evening it was a subject of common talk that the Fenians intended to cross that night, but as this had been reported so often before few people believed it. The *Morning Courier*, which bears the date of Friday, June 1, and which must have left the press before three o'clock a.m., in an article probably written about midnight, remarked that it had purposely abstained from making any reference before to the arrival of a considerable body of Fenians in the city in the expectation that their intentions would soon be more fully known, but it was then ascertained that 300 had come in on the preceding Wednesday and 200 more on Thursday, who were then quartered in the Dudley and Townsend Halls near the foot of Main Street close to the harbour. These men had little to say as to their destination except that they were looking for work. The collector of customs for the port of Buffalo by a public advertisement printed in the same paper forbade the clearance of any ship or boat between 9 a.m. and 4 p.m. without a special inspection by the customs officials and absolutely prohibited the departure of any vessel from the harbour between 4 p.m. and 9 a.m. until further orders were received from the Treasury Department. The steam revenue cutter Michigan had arrived from Erie to assist in the enforcement of these regulations. Telegrams received in the night announced that other bodies of Fenians were assembling near Malone on the frontier of Lower Canada and at Detroit. When this paper was distributed a landing had already been made in Canada by the Fenians assembled in Buffalo, which was duly reported in a second edition by a reporter who witnessed their embarkation. The *Express* had been less reticent and printed fuller reports of Fenian movements.

It is certain that the Canadian military and civil authorities in Canada had received reliable information of the contemplated raid in ample time to send a sufficient force to the Niagara to have opposed an entrance. But, apparently influenced by motives of

false certainty, they contented themselves with warning the commanding officers of units of the volunteer militia to be in readiness for active service.

In fact, Colonel John O'Neill, commanding the 13th Fenian Regiment, had entrained his body of men at Nashville on May 27. At Louisville, Kentucky, and at Indianapolis, his force was considerably increased by other parties and on the evening of the 29th it arrived at Cleveland where he expected to find a vessel waiting to transport it across Lake Erie to Canada, but a telegram ordered him to go on by rail to Buffalo. That night he again entrained with 340 men and reached Buffalo early next morning. At the Union Ironworks, a mile from the station, the train was stopped and the men were marched into the city in small parties to escape observation. A large Fenian mass meeting had been held in St. James's Hall the night before, at which it was said that large maps of Canada were exhibited and the enthusiasm of the audience was stimulated by a general invitation to come forward and select their farms now. The excitement and ardour of the local 'circles' was at its highest point. A large quantity of arms and accoutrements had been shipped to Patrick O'Day, a local auctioneer and leading Fenian, who advertised an immense sale of military stores to begin on the following Friday, June 1, at 10 a.m. A reporter who visited his auction rooms on Pearl Street found them crammed with unopened cases. Early in the evening of May 31 about 500 men assembled at the Fenian drill halls and other meeting places near the docks, many of them already armed and equipped, but before long they marched off again in bands of about fifty men in different directions. Their first plan had been to embark in the harbour but the orders issued by the Collector blocked this. Another proposal to seize the steam car-ferry of the Buffalo and Lake Huron Railway at its dock could not be carried out because that boat had been removed for the night to the Canadian side of the river. Instead of returning to their quarters or homes for the night as was expected, the various detachments of Fenians marched quickly and silently by several parallel routes to the suburbs of Lower Black Rock, five miles distant, where nine wagons loaded with arms and equipments were waiting at the canal-bridge and two steam tugs and four canal boats lay in readiness at Pratt's

wharf to convey them across the river. Brigadier-General Lynch had been assigned to command the expedition but as he failed to appear Colonel O'Neill promptly took charge as the senior officer present.

Born in County Cavan in 1834, O'Neill had come to the United States when a mere child and had served for eight years in the regular and the volunteer cavalry, rising by merit from the ranks to be a captain and had been recommended for further promotion when the civil war came to an end. In Sherman's "Great March" he had acted under the command of Kilpatrick and learned the art of gaining intelligence and subsisting troops in a hostile country as practised by that able and ruthless leader. After leaving the army he had conducted a pension agency in Nashville by which he kept in close touch with many disbanded soldiers in that region. In person he was of medium height, spare and well built, having keen, aquiline features, a light moustache and close-cut hair. His appearance was alert and soldierly and his manner quiet and courteous. He seems to have been a sincere and unselfish enthusiast. His defence of the raid was brief and frank. "You recognize the English Government as your government and the English flag as your flag. We desire to destroy both. Hence our only cause of quarrel with you. If we had been able we would not have hesitated to kill every soldier who was ready to fight for England." As a soldier he was brave, quick in coming to a decision and resourceful.

The brigade of which he then assumed the command consisted of his own regiment, the 13th Tennessee from Nashville, the 17th Kentucky (Colonel Owen Starr) from Louisville, the 18th Ohio (Colonel John Grace) from Cleveland, the 7th New York (Colonel John Hoey) from Buffalo, and an independent company from Terre Haute, Indiana, commanded by Captain Hugh Haggerty. O'Neill estimates its strength at about 800, but other estimates carry it as high as 1,500 and even 2,000. Most of the officers and many others were veteran soldiers inured to war by long experience, accustomed to endure privations and fatigue and quite capable of taking care of themselves in the field. Nearly all the officers wore the blue uniform of the Federal Army. Few of the men had any military clothing or any distinguishing dress except that many of

them were wearing green shirts and black belts. Each unit carried a large green silk battle-flag with a gold harp or sunburst embroidered or painted on it. The flag borne by the 7th Regiment, considerably tattered, is now preserved in the Museum of the Buffalo Historical Society.

About midnight the advance guard, commanded by Colonel Starr, who had also served under Kilpatrick, crossed over in a canal-boat, towed by one of the tugs, and landed quietly at Frenchman's wharf in the Township of Bertie, less than two miles below the village of Fort Erie. At 3.45 a.m. the remainder, with the exception of about one hundred, for whom there was no room, embarked in the four canal boats, which were then towed across by both tugs. It is also stated that about forty men, completely clothed in blue Federal uniforms, came down the river in row-boats from Buffalo and joined O'Neill in the early morning.

The theatre of the ensuing operations may be roughly described as lying within an equilateral triangle, bounded on one side by Lake Erie and on another by the Niagara River, of which the site of old Fort Erie is the apex and the base is formed by a line drawn from Chippawa on the river to Port Colborne on the lake, the distance from any one of these points to any other being nearly sixteen miles as the crow flies. The International Bridge had not been built and the town of Bridgeburg was not in existence, the ground it now occupies being farm land under cultivation with about half a dozen dwellings upon it fronting the river. At Fort Erie Village was stationed a "lookout party" of five or six men of the Royal Canadian Rifles under a non-commissioned officer, who were unarmed and wore civilian clothing. Their duty seems to have been to watch for deserters from the regular British regiments who might attempt to make their escape to the United States. These men were all veterans of long service and approved good conduct. The river between Fort Erie and Black Rock is a thousand yards in width and flows at the rate of six miles an hour. A ferry between Fort Erie Village and the suburb of Buffalo then known as Black Rock was carried on in daylight hours by a steamer of about one hundred tons burden, which landed and embarked its passengers and carriages at a wharf exactly opposite the Fort Erie post-office, on which stood a small wooden building used as a cus-

pump-house. This vessel burned wood in its furnace and long piles of cordwood lined each side of the gangway across the wharf. Another ferry for passengers only was casually conducted by row-boats between Freebury's wharf and Pratt's wharf at Lower Black Rock. The only stream flowing into Lake Erie between Fort Erie and Port Colborne worth mention is the Six Mile Creek, about that distance up the lake, which in the summer is insignificant in size. Falling into the Niagara are Frenchman's Creek, a few hundred yards below Freebury's wharf, in dry weather fordable a quarter of a mile from its mouth; Miller's Creek of about the same size three miles further down; and Black Creek six miles above, which was unfordable as far up as Chippawa, the small village of Stevensville on its west branch four miles from its mouth. A road from Fort Erie, now known as the Niagara Boulevard, followed the river closely all the way to Chippawa. It was very narrow in a few places and liable to obstruction by the removal of the wooden bridges over these creeks.

The Township of Bertie, out of which the village of Fort Erie had been incorporated nine years before, originally contained 38,000 acres, and with the exception of the irregular frontage on the river and lake, was laid out in blocks of forty by fifty chains with a road allowance on all sides of each block. It extended westward along Lake Erie for ten miles and its river front, being very winding, was about nine miles long. Twelve hundred acres had been separated from this township to form the corporation of Fort Erie, having a shore line of about three miles on lake and river and extending from the river due westward for more than half a mile. The main village contained perhaps six hundred inhabitants and most of the houses, shops and taverns of which it consisted were built on the west side of the river road, facing the river. Half a dozen other streets at right angles to this main street had been opened on an irregular alluvial flat, elevated only a few feet above the ordinary level of the river, about a mile in extreme length by not more than three hundred yards in width at its widest part. Each of these streets had a few scattered houses. With the exception of two large brick dwellings, all the buildings were constructed of wood. A railway embankment extended along the river front for about half a mile from the northern end of the village

outside of which were three good-sized wharves and a few petty boat-houses. Behind the village rose abruptly a clay bluff, the ancient bank of the river, some forty feet in height. On it stood one good brick residence and some distance back a small negro settlement formed of small wooden cottages.

Three parallel clay roads, half a mile apart, named the Garrison, Bertie and Gilmore roads, led due westward from Fort Erie. Another, a mile further down, began on the bank of the river near Frenbury's wharf, and was generally known as the Bowen road from a family of that name living near it. They passed through a gently undulating and thinly wooded country, mostly well cultivated with crops of grain and grass, rising gradually until the Limestone Ridge was gained. This natural elevation begins near the shore of Lake Erie at Point Abino and sweeps around in a northeasterly direction until within a mile of the Niagara River when it turns sharply eastward. Along its western margin ran a natural road, first upon a ridge of gravel and then over a bare shelf of limestone rock, which in early days became a much travelled highway between lake and river, being passable at all seasons of the year. The shallow but well sheltered bay in lee of the high sand hills of Point Abino was the only anchorage at the lower end of Lake Erie which was protected from the prevailing southwest gales and the small sailing vessels employed in lake navigation at that time often disembarked their lading of bales of furs and barrels of potash at this haven. These goods were conveyed in wagons or sleighs to the mouth of Miller's Creek where they were shipped in river-boats to Chippawa. Their return cargoes of manufactured articles were occasionally brought overland by the same route. By this road too, the boats were carried secretly with which Captain Dobbs and his seamen performed a notable exploit off Fort Erie in August, 1814.

On its western side the ridge descends, sometimes abruptly, forty or fifty feet into a broad and fertile valley through which flows the eastern branch of Black Creek which rises in a small marsh close to the shore of Lake Erie.

Fort Erie Village was connected by a recently constructed railway with Chippawa and Niagara, running fairly close to the bank of Niagara River and crossing the several creeks, flowing into it

near their mouths by wooden bridges. Another railway, the Buffalo, Brantford and Lake Huron, ran westward from a dock in the corporation of Fort Erie, about a mile south of the village proper and a quarter of a mile north of the ruins of the fort. This line crossed Six Mile Creek on a wooden bridge and had its first station and siding at Ridgeway on the Limestone Ridge, where there was a village consisting of a flour-mill, a couple of stores and fifteen or twenty houses and shops, besides two or three taverns. Its next station was at Port Colborne, but trains stopped when signalled at Sherkston roadway. A third railway, following the Welland Canal on its eastern side, connected Port Colborne on Lake Erie with Port Dalhousie on Lake Ontario. A fourth line, called then the Great Western, connected Hamilton and Toronto with Niagara Falls.

The cars of the Buffalo and Lake Huron Railway were conveyed to and from Buffalo by a steam-ferry, capable of carrying twenty cars at a trip. Its yards were near the dock, but the roundhouse for the care of locomotives was situated at the north end of the main village, and was connected with the yards by a spur. On the shore of the lake beyond the ruins of the fort stood fifteen or more small houses, occupied by the families of fishermen. To the west and north of the fort was a tract of ordnance lands containing about a thousand acres, most of it heavily wooded with ash and elm trees of considerable size. Part of this tract near the Garrison Road along its northern limit had been cleared and brought under cultivation. That portion of it nearest the road had been subdivided into five-acre plots on which cottages had been built for a dozen families of army pensioners, who had occupied them for some years. The locomotive crews and most of the yardmen of the Buffalo and Lake Huron Railway lived in Fort Erie village, but there was no traffic connection between that line and the new railway to Niagara.

The landing of the main body of Fenians was observed by a party of young men from the country who were spearing fish by torch-light in the mill-race in the river. They drove rapidly homeward, drumming upon their wagon boxes and raising an alarm at every house they passed. The news spread swiftly and the roads were soon thronged with led-horses and herds of cattle being driven off to some place of greater security.

O'Neill soon after landing ordered Colonel Starr, with his regiment to occupy Fort Erie village and take possession of the railway yard above. This was done about sunrise, but the railway officials had taken the alarm and hastily made up all their rolling stock into one huge train drawn by four locomotives, which moved slowly off when the invaders came in sight of it. Captain Geary of the 13th Kentucky with a few men went in pursuit on a hand-car, but gave up the chase on arriving at Sauerwein's bridge over the Six Mile Creek, which he burned and then tore up some of the track nearby. At that hour of the day he might easily have gone on to Port Colborne without opposition and destroyed the canal-lock there. Starr posted sentries at the taverns and ferry landing, and made a requisition upon Dr. Kempson, the Reeve, for a supply of provisions and the instant delivery of all horses in the possession of the inhabitants. His men were kept well under control and no depredations were committed. The village council was assembled and decided to comply as far as lay in their power. Provisions were collected and delivered together with about a dozen horses. The men of the lookout party were put under arrest without resistance and paroled. After cutting the telegraph wires and permitting his men to breakfast in the open air, Starr called in his sentries and patrols and marched off to rejoin the main body at the camp it had formed in the orchard and fields of Thomas Newbigging, a Justice of the Peace, on the right bank of Frenchman's Creek, close to the River Road. The planks of the bridge were taken up and a hasty breastwork was built of these with fence-rails, and other materials for defence against an attack from the direction of Chippawa. Foraging and scouting parties had gone out in several directions and soon returned with a number of led horses and several wagons loaded with provisions and poultry. Fires were built of fence-rails and the camp assumed the appearance of a large and merry picnic party. A large and well armed detachment commanded by Captain Donohue marched down the River Road as far as the mouth of Miller's Creek and burned the bridge there. Early in the forenoon the United States revenue cutter *Michigan* steamed down the river from Buffalo harbor and anchored near the wharf at the foot of Ferry Street in Black Rock. The captain of the ferry-boat was warned that the customs officers

would not permit him to take any passengers over to Canada, but this regulation, it would appear, was not rigidly enforced as a man carrying a saddle was seen to go on board soon after. No embargo was placed on passengers who wished to leave Canada and some of the inhabitants of Fort Erie took advantage of this to remove their families and valuable property across the river.

The steam-ferry continued to make hourly trips to and fro and it is probable that some unarmed men joined O'Neill by this route. Enterprising newspaper reporters certainly visited his camp and made notes of what they saw. Row-boats were constantly crossing at the lower ferry, bringing food and small accessions of men, by which his strength may have increased to a thousand of all ranks. About eleven o'clock a.m., a tug towing two canal-boats loaded with arms and supplies of various kinds came over and landed their cargo at Freebury's wharf, where it was loaded on wagons and taken to the camp. The captain of the *Michigan* attempted to weigh anchor but seeing that he would be too late to intercept these boats in American waters, decided to remain where he was, being unwilling, as he stated, to risk his ship farther down the river without having a qualified pilot on board. At noon he began to fire a salute of fifteen minute-guns in honor of Lieutenant-General Winfield Scott, who was being buried that day at West Point. This caused some excitement on both sides of the river as it was at first supposed that he was bombarding the Fenian camp. About the middle of the afternoon the *Michigan* dropped down stream and moored at Pratt's wharf, putting an end to the despatch of further reinforcements or supplies from that point. During the day Major-General George G. Meade, commanding the Military Division of the Atlantic, arrived at Buffalo and appointed Major-General W. F. Barry to command the District of Ontario, extending from Erie, Pa., to Oswego, N.Y., both places included, with headquarters at Buffalo. His orders to Barry were clear and explicit:

I direct you to use the force at your command to preserve the neutrality by preventing the crossing of armed bodies, by cutting off reinforcements and supplies, by seizing all arms, ammunition, etc., which you have reason to believe are destined to be used unlawfully, and in fine, taking all measures precautionary or otherwise to prevent violations of the law. For this purpose you will

move the forces at your command to such points as are threatened and you shall employ such tugs or vessels as can be procured for watching the river and lake shores and taking all such measures as in your judgment the emergency requires."

The force of troops at Barry's disposal was actually very small and was mainly at Fort Niagara, only a single weak company of infantry and a gun-squad of artillerymen being stationed at Buffalo. Two river-tugs were promptly hired, manned with seamen, and each of them armed with a single light gun to patrol the river and prevent the passage of reinforcements and supplies, which was effectually done.

The exact nature of the instructions given O'Neill, if he received any, has not been revealed. It is conjectured that his main object was to damage the Welland Canal. This he might readily have accomplished by sending a strong party of mounted men with explosives to destroy the aqueduct at Welland, which was unguarded. Early in the forenoon he had secured forty or fifty horses and others could have been picked up by the way. The day was fair and sunny but not hot, the roads were smooth and firm but not dusty, grass and grain were abundant in the fields and granaries. The country was fair with the flowers and verdure of early summer. Altogether conditions were ideal for a raid of that kind, but he made no attempt to carry it out. He had besides been joined by Major John C. Canty, who had resided in Fort Erie village for the past six months with his family, specially for the purpose of obtaining information. He had made himself well acquainted with the surrounding country and knew many of the inhabitants. Thenceforth he acted as O'Neill's principal intelligence officer and chief of staff.

Reporters, employed by three daily newspapers published in Buffalo, visited the Fenian encampment at Frenchman's Creek during the afternoon. They stated that they saw officers studying maps, cooks preparing food, while most of the men, not on outpost duty or absent scouting, were quietly sleeping under the orchard trees or in hastily improvised shelters. A scouting party which returned from an unexpected direction caused an alarm in which shots were fired and a man was wounded.

About [illegible] o'clock p.m. Colonel John Hoey, with two hundred men of the Buffalo regiment, marched down the River Road. After advancing five or six miles he saw a group of horsemen approaching, who turned about and rode rapidly away. Surmising them to be British cavalry scouts he halted and sent back a message. About the same time O'Neill was informed from another source that a body of British regulars and volunteers had arrived at Niagara Falls and was preparing to advance against him by rail and he quickly determined to meet it on the line of Black Creek which he presumed had already been occupied by his advanced party under Hoey. The river was already so closely patrolled by Barry's orders that he relinquished all hope of being reinforced and ordered the destruction of about a thousand spare muskets and some reserve ammunition, for which he had no means of transport. Some of his men had been drinking to excess at Stevens's tavern near the landing and a brawl followed in which one of them was killed.

Between nine and ten o'clock p.m. he began his march to support Hoey, who had been instructed to move down to Black Creek, but after advancing about four miles on the River Road, and crossing Miller's Creek, turned westward on the town line road between the Townships of Bertie and Willoughby. After reaching the Erie and Niagara Railway the column was halted, outposts were sent out to occupy the railway and road bridges over Black Creek and the rest of his men were allowed to lie down in the fields on both sides of the track. There he waited for the expected attack. It was a very secluded spot as there were no houses within a mile and the town-line road was little travelled. The time was about midnight. He asserted that his force had already been reduced by desertion and straggling to not more than five hundred and his statement is partly corroborated by the large number of stragglers who were seen on the river road next morning. About midnight it appears that he received further information stating that the force at Chippawa consisted of a battery of Royal artillery, a regiment of regular infantry, a troop of cavalry and two volunteer infantry regiments, which would advance next morning by road as wagons were being engaged for the transport of supplies. A little later he was informed that a smaller body of troops, whose

artillery or cavalry, and entirely composed of volunteer infantry, was preparing to embark at Port Colborne for Fort Erie early in the morning. His decision was soon made, for at three o'clock he gave orders to rouse his men and after allowing them a few minutes to prepare and eat their breakfast, marched southward through the fields until he reached the Ridge Road at Buck's tavern, where it was intersected by the Bowen Road. During this march across lots, a farm wagon conveying reserve ammunition broke down and he was forced to abandon part of its valuable contents. His intention, as he stated in his report, was to get between the columns and if possible defeat one of them before the other could come to its assistance. He seems to have known that the force at Port Colborne was the weaker of the two in numbers as well as inferior in military value and hoped to intercept it near the place where its progress would be checked by the break in the railway. His agents for obtaining intelligence must have been uncommonly active and successful in the night.

Dew lay heavily on the grass and the march through the fields in the dim morning light had been tiring and he found it expedient to make another short halt to close up the rear of his column. The road he had now gained commanded a wide view of the country to the west and south. It was sheltered in many places from the rays of the rising sun which already portended a very hot day, and the approach of any hostile force could be easily discovered at a considerable distance. The march was continued by that road toward the Ridgeway station on the Buffalo and Lake Huron Railway, less than three miles distant.

The regular troops in the western part of Upper Canada were a battery of Royal Artillery and the 16th and 47th Regiments of Foot, quartered in nearly equal proportions at Toronto, Hamilton, and London. About four thousand volunteer militia had been organized and received some training in the cities and towns, mostly as infantry. Although an invasion had been threatened and in fact expected for several months, no part of this force had been efficiently organized or equipped for field service. There was but one squadron of volunteer cavalry, the Governor-General's Body Guard of Toronto, which could not be made available in less than twenty-four hours. There were no engineers, army service corps,

signalling or telegraph units, and no arrangements had been made for subsisting troops in the field or transporting their supplies except by rail. No systematic method of collecting or transmitting information had been devised. Regular and volunteer troops alike had been drilled for parade purposes only, instead of being trained for the emergencies of actual warfare. None of the military lessons of the recent Civil War had been laid to heart.

St. Catharines was the nominal headquarters of a field battery of artillery, which, as already mentioned, had been relieved of the care of its guns, and of two battalions of volunteer infantry, the 19th and 20th, composed of companies organized in that town and the neighboring villages from Niagara Falls to Grimsby. Another battalion of volunteers, the 13th, had been organized for some years in Hamilton and two others, the 2nd Queen's Own and the 10th, were at Toronto. The commanding officers of all these units had been warned the night before to be in readiness for active service. At 6 o'clock in the morning General Napier, who was in Toronto, received a telegram from the acting British consul at Buffalo, stating that six hundred Fenians had landed near Fort Erie. This was soon after followed by another from some other source, estimating their number at 1,340, provided with six guns and 2,500 muskets. Napier gave orders at once for the immediate movement of all available troops at Toronto and Hamilton toward the Niagara frontier. Before noon Colonel George Peacocke of the 16th Regiment arrived at Niagara Falls by a special train with a battery of the Royal Artillery having six guns and wagons, fully horsed, three companies of his own regiment and three of the 47th. He did not advance further until about dark, when being informed that the enemy were marching down the River Road, he went forward with his infantry by rail to secure the bridges over the creek at Chippawa, instructing his artillery to follow by road, as he stated, from the want of proper cars to convey the guns. Chippawa was occupied at 9 p.m. and Peacocke then sent out some young civilians on horseback to ascertain the position of the invaders. They learned that they were in camp somewhere near the mouth of Black Creek, but as they had not been accompanied by an officer their information was rather vague and unsatisfactory. Before they had returned about midnight Peacocke had been informed

that a force of about nine hundred volunteers (composed of the Queen's Own Rifles, 480, the 13th, 265, the York and Caledonia Rifle Companies, 95, and the Welland Canal Field Battery, 60) was being assembled at Port Colborne, and he instructed Captain Akers of the Royal Engineers, who was acting as his intelligence officer, to ride across the country *and order the commanding officer to move his whole force by rail not later than 5.30 a.m., and march to join him at Stevensville at 10 a.m. next day*. The route of this movement was unfortunately selected, as the station at Ridgeway was three-quarters of a mile further east than Stevensville, and the column would be unnecessarily exposed to an attack on its march to a flank. The danger of contact with the enemy would have been lessened by detraining at a point east of Sherkston and the distance to march would not have been as far. At this season of the year there was little difference in the quality of the roads. But the only topographical guide Colonel Peacocke possessed was a post-office map showing the mail routes, and the mail-route southward from Stevensville was marked [illegible] touching Ridgeway by the Ridge Road. This was considered a sufficient reason for instructing the force at Port Colborne to detrain at that place and follow the mail-carrier's route to Stevensville.

A portion of the long train of cars sent off from Fort Erie jumped the track in its flight and was ditched three miles east of Port Colborne, but during the day the line was cleared and a working party under escort of a detachment of the Welland Battery was sent to rebuild Sauerwein's Bridge. Mr Robert Larmour, the road superintendent, went on in a hand-car to Fort Erie village, where he arrived about 11 p.m., and found the place not only unoccupied by the Fenians, but nearly deserted by its inhabitants. He met Mr Richard Graham, the Collector of Customs, who had visited the Fenian camp in the afternoon and seen, as he supposed, their whole force. When he came away there was no indication of a movement and he had seen a good many drunken and disorderly men. Mr Larmour persuaded Mr Graham to accompany him on his return to Port Colborne, believing that his local knowledge would be useful in future operations. On passing he found that Sauerwein's bridge had been made practicable for trains and the line was open once more. He returned to Port Colborne about midnight with this encouraging information.

When Lieut.-Colonel Booker with the 13th Battalion had arrived there by rail from Hamilton about an hour previous, he found Lieut.-Colonel J. S. Dennis, the brigade major of the militia district, in command, whom he outranked and superseded. The wildest rumors were in circulation and the Queen's Own and Welland Battery were parading under arms in the streets. After hearing Mr. Graham's statement, Colonels Booker and Dennis agreed upon a plan of operations by which they hoped to cut off the retreat of the invaders and ensure the capture or destruction of their whole force. Eighty men belonging to the Welland Battery and Dunnville Naval Brigade were to embark on the steam tug *W. T. Robb*, which had just arrived with the latter small unit commanded by Captain Lachlan McCallum, proceed to Fort Erie and patrol the river, while the rest of their force would advance by rail as far as seemed prudent and co-operate with Colonel Peacocke next day in a general attack upon the enemy's position. While they were yet deliberating, Captain Akers arrived and was persuaded to approve this plan. At 3 a.m. a telegram was sent off to Colonel Peacocke and without waiting for a reply the detachment was embarked. Colonel Dennis, who desired an independent command, went on board and the tug steamed away under his orders. The rest of the force was again entrained and was on the point of moving, when at 3.45 a.m. a peremptory message was received from Peacocke, saying that his original instructions must be obeyed and a junction formed with his command at Stevensville. It was deemed inexpedient to detrain again for so short a time as the men had no quarters to go to. Some of them had been drinking freely and were restless and noisy. There was little opportunity for any of them to sleep or even rest comfortably. At 5 a.m., half an hour ahead of the time fixed, an order was given for the train to start. The force on board, nominally 840 of all ranks, probably did not exceed 800 effective combatants. They had been under arms for twenty-four hours in a feverish state of excitement and were fatigued by travel and standing about, deprived of sleep, and insufficiently fed. They had no blankets, knapsacks, haversacks, mess-tins or water-bottles and their only means of carrying their overcoats was by wearing them in midsummer weather. The only horse with the column was brought by Colonel Booker and was taken to Ridgeway in a mail-car. No effort appears to have

been made to mount any of the other field-officers. No facilities had been provided for transporting the reserve of ammunition after leaving the train nor for distributing it in action. There was no ambulance or hospital staff. Three surgeons were present, one of whom was not in uniform and carried his instruments in a small hand-bag. Shortly before six o'clock the train arrived at Ridgeway and the men were quickly detrained at the platform. Few people were anywhere to be seen and little information of a reliable nature was obtained. The farmhouses round about were in fact almost deserted and the inhabitants who remained kept close indoors. The writer had passed the night in an unoccupied farmhouse nearly equidistant between Ridgeway, Stevensville, and the Fenian bivouac near the mouth of Black Creek and well recollects how strangely calm and quiet the night seemed to be. The death-like stillness after nine o'clock was broken only by an occasional far-away shot, the sound of galloping hoofs, or the barking of a dog.

Few of the officers or men were able to obtain anything to eat at that hour and much time was necessarily consumed in forming up, inspecting arms, and distributing ammunition. Although some farm wagons could undoubtedly have been obtained had a proper effort been made to find them, all the reserve ammunition was sent back in the train to Port Colborne. While preparations for marching off were still in progress, some horsemen from the neighbourhood rode in with information that a body of Fenians was approaching by the Ridge Road but their warning was disregarded. Their report indeed seemed highly improbable since the enemy were known to have been in camp at Frenchman's Creek ten miles distant late in the afternoon before. Yet these men had actually seen their advanced party and had been mistaken for mounted scouts. About half an hour later Booker began his march by the Ridge Road, which as it trended easterly was by no means a direct route to Stevensville. The sunshine was brilliant and already warm. The sky was cloudless and not a breath of air was stirring. It was a most delightful June morning but seemed the prelude to a very hot day. Meanwhile O'Neil had advanced along the Ridge Road for about a mile when his advanced scouts reported a group of horsemen riding rapidly away. It was certain

that they were not friends. Next the whistle of a locomotive travelling eastward was heard and the train was apparently coming to a stop. This was after a short interval succeeded by bugle calls which betokened the presence of troops. He continued, however, to advance until he was definitely warned of the approach of a body of soldiers on the same road, when he quickly occupied a position to resist an attack along the Bertie Road which intersects the Ridge Road nearly at right angles. A shallow ditch and a rail fence on its south side fringed with trees and shrubs afforded a certain amount of natural cover, which was hastily improved by pulling down the fence on the opposite side and setting up the rails on end against this fence, slanting forward, or building up A-shaped rifle-pits with rails, stones, or any materials at hand. His right rested on John Anger's brick house, barn and other outbuildings, which with its kitchen-garden and a small orchard, stood in the southern angle formed by the intersection of the roads, all of which were strongly occupied, and his line extended eastward five or six hundred yards with its left curving forward into a strip of maple woods on the crest of the ridge which here widens out to a breadth of about three hundred yards, sloping gently down to the Ridge Road and then dipping abruptly into the valley. By this disposition he planned to enfilade his assailants as they advanced along the road or over the cleared ground between it and the woods, which was much broken by orchards and clumps of trees. A small reserve was stationed in an orchard about three hundred yards in rear of his centre and a thin line of skirmishers was thrown forward nearly half a mile along the Garrison Road under the enterprising Colonel Starr. O'Neill's force probably did not exceed 800 men, but they were the pick of his followers, well-trained in fighting under cover, thoroughly alert and ready for action.

Colonel Booker's force had advanced in a column of fours with the Queen's Own under Major Gilmour leading, followed in succession by the 13th Battalion under Major Skinner and the York and Caledonia Rifle companies commanded by Captain R. H. Davis. On approaching the intersection of the Garrison Road, where in the north-west angle stood Michael Hoffman's small roadside tavern, whose swinging sign boldly proclaimed it to be

the "Smuggler's Home," a few armed men were detected lurking behind fences and trees in front. The Trinity College company of the Queen's Own, which was armed with Spencer repeating rifles, was ordered to extend as a firing line. Some shots were fired and two other companies were sent forward at the double to prolong the firing line to both flanks. Within ten minutes the fire became rapid and continuous. *Standing out of doors some five miles away the writer heard the sound of the first intermittent shots which were soon merged in a steady crash of musketry lasting for almost an hour.* It now seems marvellous that so few men were hurt by such a heavy and well-sustained fusillade.

Scarcely had the action begun when a telegram from Colonel Peacocke was placed in Colonel Booker's hands, instructing him to defer his departure from Port Colborne for one hour as his own movements from Chippawa would be delayed. The encounter could still have been broken off without much difficulty, but as his men were full of confidence and seemed to be already driving the enemy before them with ease, Booker wrote a note in reply saying that he was engaged and asking his commander to advance to his assistance as soon as he could. This was given to Detective Armstrong to be carried across country. The Fenian skirmishers were steadily forced back or more probably retired purposely to draw their opponents into the ambush that had been laid for them, usually reserving their fire until their pursuers attempted to climb over a fence or were checked by some other obstacle. After advancing in this manner over the fields for several hundred yards it was discovered that the maple grove on their right was occupied by the enemy who disclosed their position by firing prematurely, and the University and High School companies of the Queen's Own were extended to the right front with orders to expel them. At the same time some of the Trinity College company worked their way down into the low ground west of the road, where the men were partly screened from view by the ledge of rocks, with the intention of turning the enemy's right. But within fifteen or twenty minutes the three companies first engaged were allowed to fire away nearly all their ammunition with little effect beyond enveloping themselves in a dense cloud of smoke, hanging low in the morning air, under cover of which they had advanced almost

half a mile. They were h[illegible] where he had decided to make [illegible] h[illegible] prac-tically deserted. They w[illegible] three com-panies of the 13th in [illegible] company was sent down into the low ground [illegible] extending the first very steadily [illegible] separated from this new firing line by an [illegible] yards, and forming an obtuse angle with it, were [illegible] companies of the Queen's Own on the right [illegible] engaged with the Fenians in the woods who were well protected behind the stout trunks of the hard-maple trees which were scarred for many years after with bullet marks. On the Ridge Road and in the fields on its right about three hundred yards in rear of the firing line were the remaining companies of the 13th and the Caledonia Rifles. About the same distance still further back were six companies of the Queen's Own in quarter column, including those which had just been withdrawn from action. After sending a message to the railway station to order forward the reserve ammunition which had been so carelessly left behind on the train, Colonel Booker had dismounted and remained near the reserve. In that position he could not possibly see much that was going on in front and he had not a single mounted officer or orderly with him to transmit orders or gain information. His only means of conveying commands rapidly was by sound of the bugle. The new firing line had moved forward with such steadiness and good order that they were at first mistaken by the Fenians for regular troops, a belief which was strengthened by the sight of the red coats. Availing themselves of a thicket as cover the York Rifles supported by a party of the 13th turned their right and their whole line deserted its barricades and retired upon its reserve briskly pursued. O'Neill himself stated that he fell back a few hundred yards and formed a new line. At this moment some of his mounted men came suddenly in view around a bend in the Ridge Road, riding rapidly forward and another group of horsemen was seen in the valley on the left at a turn in a road leading straight to Stevensville. The latter were neighbouring farmers attracted as spectators by the sound of firing.

Some person then hastily raised the cry of "cavalry," which was rapidly passed along. The firing line attempted to form rallying squares in the fields and their example was followed by the supports and reserve. The Fenians in front were quick to seize their opportunity and rushed forward with loud yells, firing as they advanced, while their comrades in the woods directed their fire with some effect at the supports. Scarcely had these squares been formed when a bugler by Colonel Booker's orders sounded "retire." In an instant all was confusion and the retreat began in much haste and disorder. It is needless to inquire where the panic started. It ended in a headlong stampede. The two companies of the Queen's Own on the right were isolated for a time and lost seven killed or wounded and two prisoners in coming off. The pursuit was not pushed vigorously as the main body of the Fenians was halted near the Garrison Road, but Starr with his regiment advanced as far as Ridgeway village. Few prisoners were taken, but in some way his men became possessed of a Union Jack which was afterwards exhibited in Buffalo as the colors of the Queen's Own. Being a rifle regiment, that unit of course had no colors and this flag was certainly not a military standard.

Colonel Booker seems to have abandoned at once all hope of rallying his men and resuming the advance. The retreat was continued from Ridgeway station along the railway track towards Port Colborne. When about half way to that place Mr. Larmour met them with a locomotive and two flat cars bringing back the reserve ammunition. By noon the discomfited force was again at Port Colborne utterly exhausted and dispirited. Its total loss was too insignificant to account for so humiliating a reverse. One officer, Ensign McEachren, Sergeant Mackenzie, and seven privates were killed; five officers and twenty-six other ranks were wounded, several of whom fell into the hands of the enemy besides seven unwounded prisoners. O'Neill reported his loss, as nearly as it could be ascertained, at eight killed and fifteen wounded. It was probably greater as four were found dead and were buried on the field and six badly wounded men were left behind. Among the killed was Lieutenant E. R. Lonergan of Buffalo, and among the wounded were mentioned Captain Timothy Leavan and Michael Cochrane.

color-sergeant of the Indiana company, a very gallant fellow, who was shot down while leading the final charge with a large green flag in his hand.

Well satisfied with his success and dreading an encounter with a larger force which he believed to be advancing against him from Chippawa, O'Neill lost no time in beginning his retreat toward Fort Erie. Starr marched down the railway track, while the main body followed the Garrison Road, taking with them their unwounded prisoners.

Colonel Booker was severely criticized by some newspapers for misconduct on this occasion and in consequence demanded a Court of Inquiry to investigate it, which was granted. The Court was composed of Lieutenant Colonels Denison, Chisholm and Shanly, who reported unanimously:

"That there was not the slightest foundation for the unfavorable imputations cast upon Lt.-Colonel Booker in the public prints. That having fallen into error, he promptly exerted himself to repair the effects of his error in person and in a manner which could leave no stain upon his personal courage or conduct. That from the time the expedition started until it came out of action, it was under disadvantages with which Her Majesty's forces seldom have to contend. That more than half of the two battalions were youths under twenty years of age, very few accustomed to drill and many had never shot anything but a blank cartridge."

The finding of the Court, however, failed to reinstate Colonel Booker in the good opinion of the general public.

It is now necessary to follow the movements of Colonel J. S. Dennis. Having embarked on board the *W. T. Robb*, the Welland Canal Field Battery, commanded by Captain Richard S. King, and the Dunnville Naval Brigade under Captain (afterwards Senator) Lachlan McCallum, numbering in all eighty-seven of all ranks, he left Port Colborne about 3.30 a.m. and arrived at the Ferry Landing in Fort Erie village soon after daybreak. Disembarking part of his force there, he made a prisoner of every stranger who could not give a satisfactory account of himself. Taking on board this detachment two hours later, he dropped down stream to Freebury's wharf, where another landing was made to examine the deserted Fenian encampment. A number of stragglers were picked up in the vicinity. Strong patrols then marched down the River Road

and westward on the Bowen Road, coming out on the River Road above the mouth of Black Creek, where they were once more embarked on the tug which had come down to that point. There they were informed for the first time that the main body of the invaders had marched in the direction of Ridgeway early that morning. Fifty-eight prisoners had been taken and the tug was crowded to its utmost capacity. Returning to The Ferry Landing at Fort Erie about the middle of the afternoon, the men of the Welland Battery and eighteen of the Naval Brigade were landed there. Scarcely had this been done when a horseman rode in at full speed to give warning that a body of Fenians, whom he estimated at from six to eight hundred men, was approaching by the Garrison Road. This voluntary messenger was Captain Lewis Palmer, a man over seventy years of age, who lived on that road about two miles west of the village. He had served as a private throughout the war of 1812 and had commanded a company of the Frontier Light Infantry in 1837. Captain Akers had driven into the country in the hope of getting into communication with Colonel Booker's force and had not returned. A few prisoners who had been confined in the village lock-up were hurried on board the tug, but instead of withdrawing from a hopeless contest with overwhelming numbers, Colonel Dennis formed his men in line on the River Road near the ferry-dock. A considerable party of Fenians first appeared on the crest of the high ground north of the Bertie Road near the brick house of James Stanton, well within range of rifle fire and began firing. Almost the first shot in reply, deliberately aimed by Private Daniel Sullivan of the Royal Canadian Rifles, who had joined Dennis as a volunteer, severely wounded Lieutenant Colonel Michael Bailey of the Buffalo regiment, who was conspicuously mounted on a white horse, and caused no little confusion among his companions. A few minutes later a stronger force of the enemy came straight down the street from the south, firing and shouting wildly as they advanced. The tug hastily cast loose from the wharf and was carried down stream by the current, while the officers on shore ordered their men to scatter and save themselves any way they could. Dennis and McCallum with twenty-five or thirty others ran down the River Road and most of them eventually were taken on board the *Robb* which had steamed up the river under

fire and returned to Port Colborne, instead of remaining to intercept the further retreat of the enemy, which was still practicable. Captain King with a few men put up a gallant resistance from behind the piles of cordwood on the wharf until he fell with his ankle shattered by a musket-ball. As the enemy approached he emptied the remaining chambers of his revolver at them and threw himself into the river to escape their bayonets. The current swept him under the wharf where he clung to its supports until rescued. He was removed to a hospital in Buffalo where his leg was amputated above the knee.

A few other men, with a number of civilians, most of whom had come from Buffalo on an errand of mere curiosity, took refuge in the large wooden post-office building, which was speedily surrounded by yelling Fenians, who began to riddle it with bullets at short range. They returned their fire with good effect, and despite the protests of the non-combatants and the shrieks of the women and children, who were made to lie down on the floor to escape the bullets crashing through the doors and windows, kept their assailants at bay for a quarter of an hour. The walls were stout and an attempt to force an entrance at a door was sharply repelled, in which at least one of the attacking party was mortally wounded by a bayonet-thrust in the breast. Finally a young woman in desperation waved a white table-cloth out of an upstairs window and the firing outside ceased. Finding that their ammunition was nearly expended and that further resistance was plainly hopeless, this gallant little party surrendered. In all four officers and thirty other ranks, five of whom were wounded, were made prisoners in this unfortunate affair. The Fenians lost seven men killed or mortally hurt and had more than double that number wounded.

An hour or two later O'Neill was informed by his scouts, who were still active and kept him well advised, that the force from Chippawa had advanced as far as the mouth of Black Creek and then turned inland. He determined to retire to the car-ferry dock near the ruins of Fort Erie in the hope of receiving reinforcements or making his escape in the night. A message to this effect was successfully transmitted to Colonel Sweeney, the Fenian Secretary of War, who had come to Buffalo. His spirits were raised by an account of a great meeting held in the opera house the night before

which had been addressed by "Senator" Fitzgerald of Cincinnati and Hon. John Murphy of Buffalo, when $[illegible]300 in cash was subscribed in a few minutes, and the assurance given that hundreds of men had arrived in that city from all quarters, apparently eager to come to his assistance. The malicious satisfaction felt by some even of the better class of citizens at his successful landing was acridly expressed in an editorial published that morning in the *Commercial Advertiser*, then considered a very conservative newspaper:

> "With the memory of the recent past actions and sympathy of the Canadian people in behalf of the rebels still fresh in our minds, it is but natural that we should contemplate the present demonstration, and in fact any demonstration which may be made, as a retributive visitation over which we have no tears to shed."

Towards night he moved his whole force to the ruins of Fort Erie, about four miles above his original point of debarkation, within musket shot of the landing-place of the car-ferry, then lying on the opposite side of the river, and took up a good defensive position inside its earthworks, sending forward outposts to observe all probable ways of approach. He took with him all his prisoners who were able to march, but left behind five of his own men, who were too badly hurt to be removed. There he awaited further orders. His intentions were stated in his report rather vauntingly thus:

> "About 6 o'clock p.m., June 1, I sent word to Captain Hynes and our friends in Buffalo, that the enemy could surround us before morning with 5,000 men fully provided with artillery, and that my little command, which had by that time considerably decreased, could not hold out long; but that, if a movement was going on elsewhere, I was perfectly willing to make the old fort a slaughter-pen, which I knew it would be next day if it remained. *For I would never have surrendered.*"

His position was well chosen for either receiving reinforcements or embarking, as the *Michigan* still lay below at Pratt's wharf.

At 4.25 that morning Colonel Peacocke had been joined by 150 of the 47th Regiment from London, 425 of the 10th Battalion from Toronto, and 350 of the 19th Battalion from St. Catharines, increasing his strength to 1,400 of all ranks and arms, with six

field guns. He had planned to advance at 6 a.m., but the lack of efficient commissariat arrangements for so large a force made it impossible to give his men their breakfast in time and he postponed his departure for one hour, sending a telegram to Colonel Booker to do the same. Although the best and most direct route was due southward by the Sodom road, a distance of only eight miles, his wretched map indicated that the best route followed the River Road to the mouth of Black Creek, thence southward to the Bertie-Willoughby town-line, then westward to New Germany and then southward again to Stevensville, a roundabout course of at least eleven miles. Knowing that a body of the enemy had been near Black Creek in the night and having lost contact with them for want of efficient mounted scouts of any kind, Peacocke decided to take the longer route. An hour's delay became two and it was eight o'clock before he started. The bridge over Usher's Creek broke under the weight of the guns and caused considerable delay. The distant sound of musketry was heard but gradually died away. On arriving at Black Creek he found that the bridge had been destroyed and the enemy had marched off toward Ridgeway. Presently Detective Armstrong arrived with Booker's message. It was then 10.30 a.m. and he was still four miles from the scene of action. The head of the column was turned southward. The bridge on the town-line over another small stream broke down and again there was some delay. The heat had become excessive and as the regular troops were burdened with their knapsacks, containing their full kit, and carried besides sixty rounds of ammunition and were still wearing their heavy clothing, they felt it greatly. Many of them had collapsed and one non-commissioned officer of the 47th died from the effects of sun-stroke. The information Peacocke had received made him anxious and he endeavored to accelerate his march, riding himself with the advanced guard. On arriving at New Germany about 11.30 a.m. he received a message from the rear of the column informing him that the men were suffering much from the heat and dust and many were lagging behind or falling out in consequence. The officer commanding the battery indeed reported that his escort had so much diminished that he did not consider it safe to continue the march without having it increased. He decided then

to halt there and allow his men to rest and take their dinner. Infantry scouts were sent out and it was ascertained that Colonel Booker had retreated and a junction at Stevensville with his force was no longer possible. At four o'clock a report was received that the Fenians had returned toward Fort Erie and orders were given to resume the advance in the cool of the evening. About half past five o'clock, when a start was again made, he was joined by the Governor-General's Body Guard, a squadron of volunteer cavalry from Toronto, commanded by Major G. T. Denison, which was at once sent out in advance. The march was continued southward through Stevensville to the Bowen Road on which the head of the column was turned eastward. When the cavalry advanced guard had reached the house of Robert Bowen, near the intersection of roads where the brick school house now stands, the leading patrol observed a group of men in the road ahead of them at a place where it was skirted by dense woods on either side for almost a mile. It was then nearly dark and in the uncertain light the actions of these men seemed suspicious and when approached they climbed over the fences and disappeared in the woods. A report was sent back and the whole column came to a halt. Colonel Peacocke himself rode forward accompanied by Captain Denison and other officers. Another reconnoitring party was sent on who saw, or thought they saw, a single sentry who also moved off the road into the woods. After some deliberation two companies of the 16th Regiment were ordered forward to search these woods in extended order. This was done but after stumbling about in the dark for half an hour and finding nobody and hearing nothing they were recalled and orders were given to march straight ahead with the intention of attacking the enemy who were then supposed to have returned to their first camp near the mouth of Frenchman's Creek. The men who had been seen were believed to be their advanced outpost. Bowen, who was standing near Colonel Peacocke, then said that they could not go by that road as the bridge over Frenchman's Creek had been destroyed. It was determined to turn aside on the road to the right where there was more cleared ground and bivouac. Strong outposts were established and orders given to be in readiness to resist a night attack. No fires were lighted and the horses were kept saddled or harnessed. The retreat of the [illegible]

vaders were then believed to be entirely cut off and they were expected to make a desperate resistance. In the course of the night Peacocke was informed that another considerable body of infantry under Colonel Lowry of the 47th Regiment with four field guns had arrived by rail at Black Creek. About the same time a telegram from Buffalo asserted that reinforcements estimated at a number between two and three thousand men had crossed the river to join the enemy. He was reinforced by a volunteer battery of garrison artillery without guns which he had left behind at Chippawa. This intelligence made him wary, but his troops were roused at daybreak and ordered to breakfast at once and be in readiness to march at 5 a.m. Before it started [illegible] Hon. John Hillyard Cameron, who had accompanied the other body of troops which had come on in the night on the Erie and Niagara Railway and detrained at the crossing of Frenchman's Creek, came up the Bowen Road on horseback with intelligence that the enemy had escaped. When this force had detrained, Colonel (afterwards Lord) Wolseley, who was acting as a staff-officer for intelligence, had gone forward on horseback with a few men and learned that the remnant of the Fenian force, estimated at between five and seven hundred men, were on a large barge or canal boat moored astern of the *Michigan* in United States waters in Niagara River. Peacocke's advance was resumed, marching southward and dividing into two columns taking the Ferry and Garrison Roads when they reached them successively. The great body of woods on the Ordnance Reserve west of the ruins of Fort Erie was carefully searched by a long line of skirmishers on his right flank extending as far as the shore of Lake Erie. A few men who were supposed to be stragglers from the invaders were taken and four of them were reported to have been shot.

The retreat of the enemy had been well managed. About 2 a.m. signals from their camp in the old fort were seen in Buffalo. Two powerful tugs with a large barge which lay in readiness in Buffalo Creek at once steamed out of the harbour and crossed the foot of the lake to the wharf of the Buffalo and Lake Huron Railway where the men from the neighbouring bivouacs were quickly embarked. The *Michigan* was still moored at Pratt's wharf more than four miles down stream, and the picket-boats engaged to

patrolling the river were not in sight. All the sick and wounded who were being cared for at the post-office and at station of Erie and Niagara Railway in Fort Erie Village, which were temporarily converted into hospitals for them, were abandoned with their attendants. So hurried was this embarkation that the outposts were not called in and altogether it was believed that about 150 men were left behind. Forty of them were stated to have escaped later in small boats. When the tugs with the boat in tow were in mid-stream they were overtaken by the tug *Harrison*, employed as a patrol-boat by General Barry. The two tugs, on board which it is said several hundred of the raiders, including the principal officers, were concealed, were allowed to proceed into Buffalo harbour, where the passengers were placed under arrest by the United States Marshals, but the barge was taken down the river and anchored under the stern of the *Michigan*, where the men on board were detained for several days in considerable discomfort until instructions were received from Washington to release them on receiving sureties that they would appear for trial. Both Captain Bryson of the *Michigan* and General Barry sent courteous messages to the commanding officer at Fort Erie assuring him of their intention to co-operate to the full extent of their ability in preventing any repetition of the invasion. The general good conduct and even the good manners of most of the raiders was the subject of favorable comment among the inhabitants, who had come in contact with them. They had not been guilty of any acts of indiscriminate plunder or violence of any kind on the march. Women were not molested or insulted and deserted houses were not broken open. Horses, indeed, were taken, with carriages, harness and saddlery, [illegible] in accordance with the usages of war with which they had become accustomed in the recent civil contest, and provisions were requisitioned in considerable quantities. Their prisoners were treated with such consideration and even kindness that they had no cause of complaint.

On June 5th the Attorney General of the United States issued a rather tardy order to the district attorneys and marshals:

"By direction of the President, [illegible], you are hereby instructed to cause the arrest of all prominent, leading or conspicuous persons called 'Fenians' who you may have probable cause to believe have been or may be guilty of violations of the neutrality laws of the United States."

Next day President Johnson published a proclamation warning all citizens and residents of the United States of the penalties to which they would become liable by any infraction of the neutrality laws of the country or of the laws of nations. On the same day John O'Neill, Owen Starr, John Hoey and other leaders of the raid appeared at the Erie County Court House in Buffalo and were admitted to bail in the sum of $6,000 each, which was readily furnished by local sympathizers. The Commissioner then informed them that they were discharged and at liberty to go wherever they wished, amid great applause from those present.

"An individual in the room proposed three cheers for the Colonel (O'Neill)," said the report published in the *Commercial Advertiser* of June 7, "and this was responded to in the most enthusiastic manner, the walls of the Court House fairly echoing with the loud huzzas."

The hero of the occasion was then escorted by his admirers to the Mansion House, then the principal hotel in the city, and in response to the clamorous outcry of an enormous crowd presently appeared on the balcony overlooking Main Street. He is reported to have said:

"Gentlemen: You may not be aware that I am no speech maker. The only kind of speeches I am accustomed to are such as are made from the cannon's mouth. Situated as I am at present, I can only advise you to return to your homes peacefully and in an orderly manner. Good bye."

He left the city that night.

On June 8, General Barry, who seems to have executed his instructions in a thoroughly prompt and fearless manner, issued another drastic order:

"In compliance with instructions from Major-General Meade, in virtue of power vested in him by the President of the United States, the transportation over railroads, by water, or other mode of public conveyance, of any persons or material of war designed or supposed to be designed to violate the neutrality laws, is forbidden. The transmission over the telegraph wires of messages in cypher or otherwise, from Fenians or in matters relating to Fenian movements, is also forbidden.

"All persons are warned that any evasion or disregard of these prohibitions will be treated as aiding and abetting the violation of law."

The number of Fenians from other places who had come to Buffalo was still very large and he was extremely anxious that they should disperse and leave the vicinity of the frontier. His recommendation that they should be offered assistance to return to their former homes had soon borne fruit in the following order which he published four days later:

> Authority having been given by Maj. Gen. Meade to furnish transportation upon certain conditions to all Fenians now assembled on the Northern Frontier who desire to return to their homes and are without the means of defraying their own expenses, public notice is hereby given of the fact. All such persons now in Buffalo or its vicinity who desire to avail themselves of this opportunity and who will give their written parole to desist from any further attempt to invade Canada, and to return quietly to their homes, will be furnished immediate transportation.

Those who attempted to take advantage of this offer next day were mobbed by their recalcitrant comrades on their way to the train and taunted as being cowards and traitors. On June 14 General Meade arrived in Buffalo and after a consultation with General Barry they decided to supply transportation unconditionally for all who still remained and this modification of the order had the desired effect.

President Johnson was caustically criticized by many of his countrymen who at this time were in a particularly critical mood toward him. Some blamed him for not having issued his proclamation earlier and some denounced him for issuing it when he did. In his message to Congress at the end of the year he considered it necessary to justify himself at considerable length in a rather spineless manner, making at the same time a singular misstatement as to the date of the raid.

> "On the 6th of June last, in violation of our neutrality laws," he wrote, "a military expedition and enterprise against the British North American colonies was projected and attempted to be carried on within the territory and jurisdiction of the United States. In obedience to the obligation imposed upon the Executive by the Constitution to see that the laws are faithfully executed, all citizens were warned by proclamation against taking part in or aiding such unlawful proceedings, and the proper civil, military, and naval officers were directed to take all necessary measures for the enforcement of the laws. The expedition failed, but it has not been

without its painful consequences. Some of our citizens who, it was alleged, were engaged in the expedition, were captured, and have been brought to trial as for a capital offence in the Province of Canada. Judgment and sentence of death have been pronounced against some, while others have been acquitted. Fully believing in the maxim of government that severity of civil punishment for misguided persons who have engaged in revolutionary attempts which have disastrously failed is unsound and unwise, such representations have been made to the British Government in behalf of the convicted persons as, being sustained by an enlightened and humane judgment, will, it is hoped, induce in their cases an exercise of clemency and a judicious amnesty to all who were engaged in the movement. Counsel has been employed by the Government to defend citizens of the United States on trial for capital offences in Canada, and a discontinuance of the prosecutions which were instituted in the courts of the United States against those who took part in the expedition has been directed.

I have regarded the expedition as not only political in its nature, but as also in a great measure foreign from the United States in its causes, character, and objects. The attempt was understood to be made in sympathy with an insurgent party in Ireland, and by striking at a British Province on this continent was designed to aid in obtaining redress for political grievances, which, it was asserted, the people of Ireland had suffered at the hands of the British Government during a period of several centuries. The persons engaged in it were chiefly natives of that country, some of whom had, while others had not, become citizens of the United States under our general laws of naturalization. Complaints of misgovernment in Ireland continually engage the attention of the British nation, and so great an agitation is now prevailing in Ireland that the British Government have deemed it necessary to suspend the writ of *habeas corpus* in that country. These circumstances must necessarily modify the opinion we might otherwise have entertained in regard to an expedition expressly prohibited by our neutrality laws. So long as those laws remain upon our statute books they should be faithfully executed, and if they operate harshly, unjustly, or oppressively, Congress alone can apply the remedy by their modification or repeal."

None of the raiders were ever brought to trial in the United States, the district attorney, as the President's message shows, having been instructed to enter a *nolle prosequi*. O'Neill's official report, although written immediately after his return from Fort Erie, was kept secret for obvious reasons. Four years later, after the ignominious failure of another attempt at invasion of the

Governor of Lower Canada on 25 May 1870, also directed by him, it was published in New York It is a careful and straightforward statement of the most probably truthful and comparatively true facts hereafter.

RECOLLECTIONS OF THE BATTLE OF RIDGEWAY

By J. F. Dunn, Ridgeway

You have given as the subject of my address today "Recollections of the Fenian Raid." I would not lead you to think I really witnessed the events I am about to describe. My home at this time was twelve miles from the battlefield. Four years after the battle I came to Ridgeway, a boy just out of school. A trip to the battle ground always had an attraction for me, and I have had exceptional opportunities of securing data. I feel quite sure I shall be able to leave with you some information not before published.

I am indebted for data to Andrew Benner of Ridgeway who, although near his 80th year, is still hale and hearty. Mr. Benner followed the Canadian troops from Ridgeway to the battle ground and witnessed nearly all of the battle. To the late Jacob Stoneman who helped bury the Fenian dead, and to Patrick O'Dea, Jr., son of Patrick O'Dea of Buffalo, N.Y., the Fenian Secretary of War. Patrick O'Dea, Senior, up to a few decades ago could often be seen on Main Street, conspicuous by the large green harp embroidered on his left arm. His contribution to the "cause" was $250,000.

His son used to come into the Main Street music store in which, during the winter months, I was employed as a salesman and buy pianos for his house. As I rented a room from him on Franklin Street I got to know him pretty well and he gave me a very highly colored engraving of the Battle of Ridgeway as he put it, "painted from an Irishman's standpoint." Incidentally he gave me some valuable information in regard to the Fenian organization, a part of which I shall use. I am also indebted to three other persons whom I shall mention in this narrative.

John O'Neill, famous fighter during the American Civil War and commander in chief of the Fenian Army during the Battle of

Ridgeway on June 2nd 1866, is worthy of a short sketch. In the year 1862 Colonel Morgan, editor of one of the southern newspapers, was commissioned by the Provisional Government of the C.S.A. to organize a regiment of mounted troops not less than 600 men for guerilla warfare. Officered by the chivalry of the south this daring band of rough riders ravaged the country north of the Mason and Dixon line. Sweeping up horses from the many stock farms, they put to the torch every factory and mill whose owners failed to put up the price and next day would burn a town 60 miles away. Brigadier General Stoneman, who commanded one of the finest cavalry brigades in the service, was asked to organize from his brigade a composite regiment of cavalry. This was done and the 7th Michigan were given the best horses that money could buy and arrangements completed for fresh mounts when needed. The orders were to follow night and day with a fire brand and destroy his force. Colonel John O'Neill was given the command. How after several historical battles he finally on the banks of the Ohio River laid the rebel chieftain low and destroyed his command is a matter of history.

I am giving you this that you may know the manner of man Colonel Booker had to meet on the memorable 2nd of June. A few years ago I spent a pleasant evening with a gentleman who as reporter for an American daily followed the northern army during the war. Said he: "I knew O'Neill and his fine regiment. He was a perfect specimen of the dashing, dare-devil Irish soldier and his men adored him."

At the beginning of the American civil war my own brothers Charles Sperry Dunn and William Carter Dunn left their home in Pelham and enlisted in the same cavalry brigade. Charley fought under O'Neill in the 7th throughout the campaign and until the close of the war. I have often wondered what my brother would have said had he known that the man for four long years he had followed in many a hard-fought battle would one day at the head of a hostile army invade his native country. His own brother (they were in the same brigade but different regiments) was killed at Fayetteville, N.C. near the close of the war.

When I asked the war correspondent how so intelligent a man could entertain such a wild proposition as an invasion of

Canada he replied, Well, the war was over and he was out of a job. The adventure appealed to a man of his temperament; then the large sum of money he was paid no doubt came in handy.

I learned from another reliable source that General O'Neill, in discussing the battle some years afterward, used the following statement: "I have nothing but praise for the conduct of the enemy in that battle. Up to the time when they made the fatal mistake of forming the square, they had driven in all my skirmishers and were steadily advancing on my main position which was well fortified. While I had a number of veterans many of my men had never been in battle and gave me a good deal of trouble. We were, to tell the truth, just on the point of retiring to the woods near-by when the enemy, seeing a few of my men who had horses they had picked up, formed a square to prepare for cavalry. Seeing their mistake, the officers evidently gave orders to reform. It was my opportunity and just at the psychological moment I gave the order to charge. My men gave the old Union yell and some southern vets gave the Rebel yell, Yi-Yi-Yi, in the well-remembered high key and you know the result. On the retreat the officers repeatedly rallied a part of their troops, in fact they gave us a few volleys, but all was confusion and we won the day."

In corroboration of what I have just said, allow me to quote from "Troublous Times in Canada," page 53, a book written by Capt. John A. MacDonald, ex-Capt. 43rd Battalion, Ottawa and Carleton Rifles. I met Capt. MacDonald about ten years ago and spent a very pleasant hour with him. Capt. MacDonald was a veteran of the raids of 1866 and also in 1870.

The unfortunate termination of the Battle of Ridgeway was a great disappointment to Lieut.-Col. Booker's force, and he was severely condemned for having given the fatal order which resulted in huddling up his men in a square in an exposed position and finally resulted in a retrograde movement. But under similar circumstances any other officer might have done likewise, and to his credit it may be recorded that he did his best to retrieve the consequences of his error and by personal courage on the field endeavored to stop the retreat. He had no staff to assist him, and was the only mounted officer on the Canadian side, so that he was at a disadvantage. Moreover, he had never previously manoeuvred

a brigade even on parade, and to handle one in battle was a trying ordeal to an inexperienced officer who had never before been under fire.

It was a most dangerous occurrence for in another ten minutes of fighting General O'Neill's forces would have been defeated and in full retreat. In fact O'Neill himself admitted this. He complimented our men highly on their courage and steadiness and said he had taken them for regular British troops and could not believe they were merely Canadian volunteers without any previous experience.

I have it on the best of authority that General O'Neill frequently praised the gallantry of the Canadian force, on one occasion using the following words: "In my four years of hard fighting I have never seen inexperienced troops fight more gallantly than did those Canadians. It is just what I might have known, though. You see I know the breed." He had a large number of Canadians in his famous regiment. As the archives at Washington reveal the fact that 47,436 Canadians enlisted during the war in the armies of the north we can readily believe this.

On arrival of the special train containing the Canadian forces they disentrained and formed up in the following order: The Queen's Own Rifles, under command of Major Charles T. Gillmore, led the van. No. 5 Company were armed with Spencer repeating rifles and were the advance guard. The York Rifle Company, Capt. Davis, next. The 13th Battalion under the command of Major Skinner and the Caledonian Rifles, formed the rear guard.

When half the force had passed the house now owned by E [illegible] Bean (about three-quarters of a mile from the village) the skirmishers sent out by the Fenians opened fire from a thicket of pines about 300 yards east of the Ridge road upon which our men were marching. At a sharp command from Col. Booker they deployed in skirmishing order and the fire was returned. The Fenians retreated, followed by the Canadian force, firing as they advanced. The Fenians, joined by other skirmishers who were just north of where the Ridge Road crosses the Garrison Road, now opened a galling fire from a sheltered position. Ensign McEachren fell on a broad flat stone at the top of the hill, just in front of where Ben Weaver's house now stands and was carried into a log house a few yards

from where he fell. He and another soldier was also killed on the hill. Chas. Lugsdin was shot through the lung. John White of the Highland Company was shot in the arm near the shoulder and Lieut. Routh was shot through the lung and hip, all very seriously wounded and very weak from loss of blood, were carried into the log house. These men were nursed and taken care of by the late Mrs. Jacob Danner and her little grand-daughter Georgia Beam.

On Monday, two days after the battle, the wife of Lieut. Routh, the sister of Chas. Lugsdin and the wife of John White arrived to care for the wounded. Before that the army surgeons assisted by Mrs. Danner and her little grand-daughter cared for the wounded. There were a few other wounded men in this house but I mention those too badly hurt to be moved.

If you should ask why I am so well informed in regard to this part of the narrative, I might reply that eight years after the battle I married the little grand-daughter. If you will call at our house we would be glad to show you a copy of Byron's poems, bound in black and gold, on the fly-leaf of which is inscribed: "Presented to Miss Georgia Beam as a slight acknowledgment for courteous attentions received at Ridgeway on June 2nd, 1866. W. D. Dobbie."

Mr. Dobbie was a veteran of the Crimean War.

Sergt. Hugh Matheson and Corporal F. Lakey who were severely, though less seriously wounded than the three above mentioned, were removed to St. Catharines and died there, Sergt. Matheson on June 9th and Corp. Lakey on June 11th. Mrs. Beam has always claimed that if they had been left in the log house to be taken care of there, their lives might have been saved.

After about twenty minutes of sharp fighting the Fenians fell back to the main body just north of the house now owned and occupied by Albert Athoe, then owned and occupied by the late John Angor, father of W. E. Angor of your city. John Athoe purchased this property about ten years after the battle. The main body of the Fenian force were just north or rather north-east of the brick house and here the real battle was fought. O'Neill had placed his force in a flanking position and thus had the advantage of cover, while the Canadian force fought in the open. Despite this fact more of the enemy were killed than of our force.

Six Fenians were buried in one grave on a bank between the John Anger house and the property owned by Wm. Teal; one in the orchard of the property now owned by Mr. Latchenberger and one close to the Ridge Road and directly in front of the property now owned by Fred Frew. Probably two of those bodies were removed by relatives.

Mr. Beamer told me he well remembers a big Irishman who came looking for his son who, as he put it, did not come back. Said Mr. Beamer: "We dug up the six then the one in our orchard and I am sorry I cannot say if he found him as I did not go to the last place with him." I have heard however from another source, that the old man recognizing his son's shoes on the feet of the man he hired to dig over the body, made him point out the spot where his body was buried and he found him in the eighth grave.

Of the eight Fenians who were buried after the battle it is safe to say not one of them are resting in these graves today. Jacob Stoneman, who knew the location of every grave, told me of a certain American doctor who wished to procure a skeleton and although every place was searched, not one could be found. He then knew why so many visitors from over the river and whom he suspected were medical students, had asked to be shown the places of burial.

I shall close with an old recitation I have not given since 40 years ago. I found I could remember but the first and last verses. The rest I have tried to supply.

THE FINNEGAN'S CIRCLE

When the copperheads and rebels in the old United States
Were hatching up a shindy about their darky pates
There came a word of sorrow across the briny sea,
That Mister O McFinnegan wanted Ireland to be free
So Mister O'McFinnegan and Thady J. McPhee,
They organized the circles and the centres don't you see
To raise the funds that bought the guns and filled the canteens too,
To prime the boys to make a noise, and raise a hullabaloo
So Paddy O'Dea and Terence O'Shea and Phelim O'McGore
They canvassed all the faithful and raised the cash galore
Forty cents from Pat and Bridget, twenty cents from many more,
Was the purse that O'Mahoney gathered up among the poor

With a lot of rusty muskets and a thousand old canteens
They set out to cook for Canada, a dish of Irish greens
But the redcoats set the table in such a spicy way
That O' Finnegan decided to dine some other day
So back across the border helter skelter ran the host
Leaving cook and bottle washer to settle up the cost
And the circles and the centres went to everlasting smash,
While the President and Secretary gobbled up the cash.

Tablet in Memorial Methodist Church Ridgeway

SACRED TO THE MEMORY OF THE RIDGEWAY MARTYRS

Who Fell Defending Their Country in the Fenian Invasion June 1866

Malcolm McEachren Ensign
Queen's Own (Killed)
Hugh Matheson Sgt.
Queen's Own (Died of wounds)
Wm Smith
Queen's Own (Killed)
J. H. Mewburn
Queen's Own (Killed)
Francis Lakey Corp
Queen's Own (Died of wounds)
Mark Defries
Queen's Own (Killed)
Wm Fairbanks
Queen's Own (Killed)

Go strew his ashes to the wind
Whose sword or voice has served mankind
And is he dead whose glorious mind
Lifts thine on high
To live in hearts we leave behind is not to die

Erected by the citizens in the vicinity of the Battleground.

THE FENIAN RAID IN WILLOUGHBY

By George Wells

Reminiscences of my boyhood days at the time of the Fenian Raid when I was on the farm in Willoughby, my native Township, is the subject I have chosen for this brief paper.

The first chapter as I remember it of the Fenian Raid—as relates to the invasion—a chapter apparently unknown to many of the older citizens of the Township—and to none, probably, of the present generation, as I have never read it in print.

I remember it was a beautiful morning in June—Friday, the 1st day of the month, 1866—that the Fenians crossed the Niagara River from Black Rock, on the American side, to the Canadian side, about one mile below Fort Erie, a place known as the Lower Ferry Dock. It was between the hours of three and four o'clock in the morning, and they crossed in scows seized at the Buffalo docks by General O'Neill, the Fenian commander in charge of the army. I was told the following account by an old resident of the county.

Conlon Bros. (John and Thomas) of Thorold, Ont., (of whom Canada had no more loyal citizens) were extensive dealers in timber and wood in those early days, and a large part of their business was transacted with Buffalo merchants. Conlon Bros. were the owners of a number of scows which were used for transporting their products to the American cities.

On this memorable morning one of these scows had just been unloaded at the dock in Buffalo and the captain was making preparations to return home when the boat was seized by General O'Neill (with others) and was used to carry the Fenians across the Niagara River; the steam tug J. H. Doyle was also seized to tow the boats. The tug was owned in Buffalo, and was afterwards bought by the late Capt. James Rampton and brought to Welland and rebuilt, and the named changed to the "*Venus*

Some years later John Conlon was a candidate in Welland County for the Dominion House of Commons and the argument was used against him in the campaign (not from the public platform, but by unscrupulous enemies) that he had loaned the scow to General O'Neill for that purpose.

As I have stated it was a beautiful June morning that I was wending my way to school at No. 6, little knowing of the thrills that were awaiting me at the little country school with its peaceful surroundings which was located about one and a quarter miles from my home. When nearing the school a number of the children—who had heard the news—came running to meet me. Some of the older ones with sad faces (who understood the situation) and others with smiles because the teacher had dismissed them and thinking no doubt about the extra holiday. We all went back to the school house when the teacher dismissed us. My imagination is that I beat all world's records as a sprinter for that mile and a quarter home to spread the news that the Fenians were over.

Father and mother and many of the neighbors had received the news before me—but father did not appear to get excited. My two older brothers had saddled their horses and went on a scouting expedition in the direction of New Germany.

Many thrifty farmers in the neighborhood carried large sums of money in their homes—as there was not the banking facilities we have today—banks were few and far between. But I had heard father say that T. C. Street was the banker for most of the farmers around him as he held the mortgage on their farms.

Perhaps had it not been for the Fenian scare I would never have known how much money my father had at that time but with mother I was taken into his confidence and the money was brought forth to be planted. We lived in a log house with no cellar so we could not plant the money in the cellar. There was a large root house and there the money was interred in about two feet of earth in the presence of father, mother and myself. There was no paper money, it being all gold and silver, and was placed in two glass fruit jars.

Father dealt quite extensively in cattle, sheep and horses and his buyers in those early days were nearly all Americans. I have

seen them come in the house to pay father for the stock and they would have a long canvas bag with a padlock at one end, which they would open up and pour the gold and silver coins on the dining room table—and the table was quite large as there were ten in the family.

By the time the money was counted one of my brothers had returned with the news that the Fenians were taking all the horses for their cavalry and scouting.

The next thing was to hide the horses, which was no easy matter. There was a small creek that ran through father's farm and it was divided at one place, forming quite an island which was thickly covered with trees and there the horses were corralled. Father did not bother with the cattle or sheep.

By the time we returned from caring for the horses we saw many loads pass by containing furniture, bedding and other household goods, which were making their way into the country—no doubt many of them to relatives. One of our neighbors, who had horses from near New Germany, was besieged with his kin till Sunday when the excitement blew over and all returned to their homes.

On Sunday, the day after the battle, my father took me to see the soldiers encamped at New Germany.

It was a grand sight to see and one that has never been erased from my memory.

MY RECOLLECTIONS OF THE FENIAN RAID

By M. G. Sherk

At the time of the Fenian Raid of 1866, we were living in Stevensville, a small village about four miles from Ridgeway and about the same distance from the locality on Limestone Ridge where the battle occurred. My father, Rev. A. B. Sherk, a minister of the United Brethren Church, the night the invading army led by General O'Neill crossed the Niagara River into Canada, had been attending an evening meeting in the U. B. Church on the Garrison Road, three miles from the village of Fort Erie. He spent the night at the house of John Hershey, one of his church members, a well-to-do farmer and a man prominent in municipal affairs in the Township of Bertie. Early the following morning he was sitting chatting with his host when a neighbor came in and saluted Mr. Hershey with: "John, did you hear the news? The Fenians came over last night, eight hundred strong, and fifteen hundred more are ready to follow." My father's first thought was of his family, so he at once set out for home. My mother, alone with her children, was awakened at early dawn by the noise made by numerous vehicles passing through the village, and on going to the front door of our house she stood near the roadway, saw women and children, some of them partly dressed, huddled in wagons along with a few articles of furniture, bedding and provisions, on their way to the big marsh a few miles back in Humberstone Township. One of the women, wringing her hands frantically, called out to my mother, "The Fenians are coming. They are only a few miles behind. They are killing men, women and children as they go." I remember as a boy not quite five years of age my mother taking me across the bridge over the creek to the house of Peter Hendershot, the local merchant. Mr. Hendershot being away at the time, Mrs. Hendershot was having a wagon

loaded with a few things preparatory to fleeing, but as my mother expressed no great concern she decided to give up going. Just then my father was seen coming down the hill in his gig and I followed my mother out to the middle of the cross-roads to meet him. He was anxious to follow the fugitives farther into the country. My mother objected but proposed going down to her father's (Capt. M. D. Gonder), one mile below Black Creek post office, on the Niagara River Road. This proposal did not suit my father who thought there would be more danger there. My mother then said she would be willing to go to her uncle's Joshua Fares, a few miles into Crowland Township.

My father gathered a few things together and placed them in his gig and we started, but when we got to our destination we found my mother's uncle's family with their wagon loaded with a few necessaries ready to go farther away from the border. On my mother laughing at her Aunt Sally Ann for being so frightened her aunt said to her, "Well, Rebekah, if you are willing to stay we will."

I remember going out into the old-fashioned garden at the back of the house the morning of the battle and hearing the noise of the engagement on Limestone Ridge. My father and mother's uncle went together to view the battle-ground shortly after the battle and before the bodies of the dead Fenians had been taken from the field. He noticed that the buttons had been cut off their coats. He thought this had been done by their comrades but it was more than likely done by visitors who carried them away as souvenirs.

After we had left our home at Stevensville one of my mother's brothers (H. J. Gonder) arrived there, sent on horseback by my grandfather to see how things fared with us, but as we were not found he, accompanied by several men on horseback, one of them being J. H. Alber, for many years postmaster and general store-keeper at Black Creek, rode along the road to the Fenian camp-ground to have a look through field glasses and telescopes at the Fenians when a Fenian officer rode up to them and took them prisoners. They were kept in camp until twelve o'clock that night and then released. Their horses were not given to them but were

found a few days afterwards running loose on the roads after the Fenians had skedaddled, somewhat scared by the usage given them.

The horse belonging to my grandfather that my uncle rode was called "Fenian" ever after.

Some of our soldiers came from different parts of the country by way of the Falls, where they detrained and then took the road by way of Chippawa to New Germany and Stevensville and thence to Fort Erie to join the forces already assembled. My father being on the road at the time was stopped by our officers in command to inquire the way. Some of the poor young soldiers, many of them students from Toronto University, who were so hurriedly called out from Toronto and other places, were so fatigued by forced marching and used up for want of sleep and with hunger that the farmers' families along the river road came out and served them with milk and other refreshments as they marched past.

Although the engagement at Limestone Ridge would be considered a trifling affair it showed the necessity of being prepared and of a proper organization of the militia. My maternal grandfather, M. D. Gonder, who had served as acting-captain after the death of Captain Usher, who was assassinated by MacKenzie's men who came from Navy Island in the Rebellion of 1837, and who was afterwards captain in the militia for years, made the remark that our militia was very badly handled and that it should have been an easy job to have rounded up the Fenian mob.

The rank and file of the Fenian army were made up of very ignorant Irish, many of them believing that Canada was a wilderness and that it would be an easy matter to take possession of it and then parcel the land out among themselves. The officers who had been living on salary from the funds that had been furnished the society by sympathizing Irish, many of them hard working servant girls, had to make some sort of a raid to satisfy their followers even if they knew it would result in failure.

It is said that in the remote Irish settlements of Canada there were parties who were in sympathy with the Fenian movement and who expected to acquire the property of their neighbors if the invasion was a success. In York County in the immediate vicinity of the then Toronto of those days there were known to be

at least two Fenian head-centres and much secrecy was observed in the movements of these people. Quantities of pikes were said to be stored in the houses of members of the organization. Of this I am informed by a then Toronto citizen who has a distinct recollection of the Fenian Raid.

On the Sunday following the day of the battle services in some of the country churches of the frontier were omitted, there being no congregations to greet the ministers, the people being in a condition of panic, not thinking of worship.

I heard my father say that after the Fenians had embarked at Fort Erie in a large scow for the return to U. S. soil, they remained for some time midway in the stream, not being allowed to land on the New York State side of the river. Uncle Sam's government at Washington after having allowed the affront to the British flag, seeing the predicament they might be placed in, had in the meantime got busy and was puzzled what to do, not knowing whether to let the Fenians land on U. S. soil or to leave them to the mercy of the Canadians. Some of our officers who arrived on the scene after the Fenians had departed were for putting a shot into the boat and sinking the ruffians, bag and baggage, but on deliberation it was considered unwise to do so, as the act might lead to international complications, it being a question whether the boat was in U. S. or Canadian waters. We think, however, the U. S. would have had no reason to complain, for they knew beforehand that the Fenians intended to invade Canada, having allowed them to arm and equip themselves as well as to drill on their territory and to parade in the streets of Buffalo and Chicago. The people of the Northern States at that time we know had no great love for Britain on account of the sympathy shown in their Civil War to the Confederate States by the British people. We believe that their old animosity has been forgotten and that the U. S. and Great Britain are now on lasting fraternal terms.

Several of the farmers in the vicinity of Black Creek on the Niagara River who had valuable horses, it is said, swam them across the river, three-quarters of a mile wide at this point, rather than run the risk of their falling into the hands of the Fenians, and it is said some of them moved part of their household effects over as well. My grandfather gave orders to one of my uncles

to gather all the horses on the place together and take them to another farm he had several miles back in the country. My uncle was asked all sorts of questions by the wondering people he met who had not heard of the invasion.

Another of my uncles found in the woods in the vicinity of where the Fenians had been encamped, leaning against a tree, a Fenian rifle with a knapsack containing among other things a Roman Catholic prayer book on the fly-leaf of which was written in pencil: "John O'Neill his prayer-book. Holy mother for me pray, and take on my dying day my soul to Heaven."

Until I was seven or eight years of age, when living one hundred miles from the Falls, on our annual visit to grandfather's on the Niagara River, when passing by a bush along the road, imagination would picture soldiers in rifle-green as ready to pop out from behind the trees, my young mind having been so vividly impressed by what I had seen and heard at the time of the Fenian Raid.

One of the patriotic songs sung at the time, a parody on "Tramp, Tramp, Tramp, the boys are Marching," contained these verses (the only two I remember):

In a cottage by my side
Sat the darling of my pride
And our happy children round us are at play
But the news spreads o'er the land,
That the Fenians are at hand
And our country's call we cheerfully obey.
Chorus
Shout, shout, shout ye loyal Britons
Cheer up, let the Fenians come
For beneath the Union Jack
We will drive the Fenians back,
And we'll fight for our beloved Canadian home.

Old Mahoney needs some cash
And he contemplates a dash
With his troops upon our soil to raid
But he'll find to his dismay
That the thing will never pay
And he'll wash himself off British soil again.

In 1870 there was another Fenian scare and an attempt at invasion at Eccles Hill, Quebec, when the 3rd Victoria Rifles of Montreal drove the invaders back over the U.S.A. border. I remember that year on our annual visit to grandfather's during the summer holidays, dragoons on horseback were constantly patrolling the river-road from the Falls to Fort Erie, watching the frontier. One day I was leading one of my grandfather's horses down to the watering-place at the river, when I saw a passing Dragoon put his hand to his belt as I thought to get his pistol to shoot. Timorously I let go the halter-shank by which I was leading the horse, and hurried to the house. My grandfather afterwards often laughed and joked me for letting 'Old Barney' go down the road after the soldier.

The foregoing childhood reminiscences only touch briefly on the history of the Fenian Raid that was only we may say the invasion of a day, but they show the feeling that created among the people in the immediate locality and in Canada and the patriotic spirit that was roused by the occurrence all over Canada.

PERSONAL EXPERIENCES IN THE FENIAN RAID

By Albert W. Reavley, Gunner, W.C.F.B.

On the 31st of May the news was flashed over the wires that a large body of Fenians was assembling at Buffalo for the purpose, it was supposed, of crossing into Canada. Next day events proved the report true. A body of men variously estimated from 1,000 to 5,000 landed at Fort Erie. They made a demand for provisions and received a supply from the village council. The Fenians brought many more arms than they needed. At Frenchman's Creek, where they encamped the first night, they burned the extra arms. Early in the day they sent a party to burn Sauerwein's Bridge. This, you will all know, is the G.T.R. bridge near Mr. M. Sexsmith's.

Meanwhile the volunteers were called out and rushed to the frontier, and notwithstanding the fact that several regiments of regulars and two batteries of Royal Artillery were stationed at Hamilton and Toronto, the volunteers were the first on the ground where the attack was made.

The Queen's Own came by boat from Toronto to Port Dalhousie, and by the G.T.R. reached Port Colborne about 10 a.m. On their way they picked up at Port Robinson one division of the Welland Canal Field Battery. Later in the day the 13th Battalion of Hamilton and the York and Caledonia Rifles arrived. The total strength of these corps was about 2,000 and the presence of so many caused a famine for two days.

On Friday the Welland Canal Field Battery furnished a guard of twenty-one men to protect the construction party which repaired the Sauerwein's Bridge. This was a work of some hours and the party did not get back to Port Colborne till midnight. At Port Colborne the three officers who were highest in command were Col. Booker, 13th Battalion, Col. Dennis, Queen's Own, and Capt. Akers, Royal Engineers.

(a) These officers received orders to patrol the Niagara River with the tug *Robb* and prevent the retreat of the force already in Canada, and keep reinforcements from crossing. The Welland Battery, Capt. King, and the Dunnville Naval Brigade were assigned the tug. It may be noted that Capt. McCallum of the Naval Brigade was owner of the *Robb*. They embarked at 4.30 a.m. on Saturday and with Col. Dennis and Capt. Akers with them started for Fort Erie.

(b) Col. Booker in command of the Queen's Own, the 13th and the York and Caledonia Rifles were to go by train to Ridgeway and march across to Stevensville and effect a junction with Col. Peacocke who had orders to march from Chippawa to New Germany. Peacocke's force was made up of H.M. 16th Regiment of Infantry, a battery of Royal Artillery, six guns, and the 19th Battalion, St. Catharines, and Governor-General's Bodyguard. A third column composed of H.M. 47th Regiment, a battery of Royal Artillery and some volunteers was to move up the Niagara River and there it was hoped the enemy would be hemmed in and finally disposed of.

On the night of June 1st, an official of the G.T.R. who had been at Fort Erie arrived at Port Colborne and reported that the Fenians were all drunk at Frenchman's Creek, that they were quarrelling and fighting with each other, and that fifty good men would put them to flight. This report was true in all respects for it was stated that a boy was killed in a drunken fight. This report had one very disastrous effect: it led the volunteers to despise the enemy, so as to under-rate their fighting power. It also fired the officers with a desire to win the honor of beating the enemy before the regulars could get a hand in, and is in some degree accountable for Col. Booker's rash haste the following day, and the failure to carry out to the letter the orders received.

We left the Fenians at Frenchman's Creek, near which they passed the first night. They marched along the line between Bertie and Willoughby, heading, it would seem, for Welland, with the object of destroying the canal or rendering it useless. But before they got near to New Germany they evidently learned the part that Booker's force was to take. So Col. O'Neill changed his line of march and made for the Ridge Road, upon reaching which

he followed it up to Bertie road where Athoe now lives. Here they halted and made preparations to receive Booker. They took the rails from the fence on the north side of the Bertie road and laid them sloping down towards the south, the upper ends resting on the top of the fence, north of the road and the lower ends on the ground. This made an effective barricade against the bullets of the Queen's Own. Here they waited for Booker.

None of the higher officers of the Fenians were known to have been in Canada. Neither General Sweeney nor O'Mahoney were reported present. The command devolved on Col. O'Neill who had made himself famous by the defeat and capture of the force of Morgan, the confederate guerrilla. Col. Bailey of the United States army was present and took charge of a part of the fighting line. On the march the Fenians had secured a few horses on which their officers were mounted. It was the sight of these which caused afterwards the disastrous but false alarm of cavalry.

On the morning of the second of June Col. Booker with his command took train at Port Colborne and detrained at Ridgeway where he learned that the Fenians were waiting for him at the Bertie road. Sam Johnson offered to lead him to the enemy. The whole force lost no time in moving down the Ridge road acting as some thought very rashly and no doubt expecting an easy victory. Before the Canadians reached the Garrison Road they found themselves in touch with the Fenians. Shots were fired by the Fenian pickets. The Queen's Own deployed on the Garrison Road and the line of skirmishers advanced and gradually drove back the advance posts of the enemy. A little before 9 o'clock Detective Armstrong galloped up with a message from Col. Peacocke stating that he (Peacocke) could not move as rapidly as he had expected and that Booker should delay his advance and move slowly. This order was nearly an hour too late to prevent the action desired. In this hour several casualties had occurred. McEachren, McKenzie and Tempest had fallen and a number had been wounded. The main body of Fenians had been driven back from the barricade on the Bertie road. Many had given up the fight and were on their way to Buffalo. O'Neill's men alone behaved as soldiers. They were retiring in good order feeling that they were losing the honours gained in the defeat of Morgan. But

just then something happened which turned the scale in their favor. The ammunition of the firing line was exhausted. It was necessary to replenish it. It was intended to have the 13th relieve the Queen's Own. The York Rifles and one company were moved to the front. There was some delay and then a few mounted Fenians appeared on the ridge north of the Bertie Road. In some unaccountable way an alarm "prepare for cavalry" was raised. The greater part of the force formed into squares on the ridge road a little north of Elisha Teal's house. One man was killed in the square and it was very fortunate that the nature of the ground and the numerous trees prevented the enemy from pouring in a destructive fire. After this there was much confusion and many were panic-stricken. A fact which need not cause great surprise, when we consider the large number of boys—you could not call them men—who made up too large a part of the force. This is especially true of the 13th. In spite of all efforts of the officers, there seemed to be no possibility of getting all to make a fresh attack. A majority were willing to renew the fight, but twenty per cent or less made off and the majority seemed unwilling to make further resistance unless all did so. Thus the action of the minority decided the action of the whole. The Queen's Own, the York and Caledonia Rifles retired steadily exchanging shots with the pursuing Fenians. The writer remembers a private of the thirteenth who was wounded in the neck and who was being helped along by two comrades, yet the wounded man wished to stop to fire back at the enemy who were getting dangerously near. The Fenians followed the retreating force quite into Ridgeway and after visiting the hotel, marched back to the Garrison Road and after a time started for Fort Erie where they arrived about six o'clock.

The volunteers marched in straggling parties along the main road towards Port Colborne. Not far from Sherkston they were met by a train composed of flat cars, which could not take in all. The train went to Port Colborne and made a second trip for the rest.

We now return to the *Robb* which had been sent to Fort Erie. Col. Dennis and Capt. Akers took command. They landed at Fort Erie, disembarked most of the hundred men and marched down the river. They took many prisoners, sixty-five in all, these being

camp followers who were heading for the American side. Some of these carried knives and revolvers and were of course disarmed. On the whole these were the worst looking lot of ragga-muffins to be seen outside of a penitentiary. These all marched as far as Black Creek where all went aboard the *Robb*. The *Robb* with her prisoners arrived at Fort Erie a little before six o'clock. Col. Dennis ordered his men on shore at the lower ferry dock. He was preparing to billet his men in the village, for they had not had a meal since morning. A few had been fortunate in getting a drink of milk or a small lunch at farmers' houses during the day. At this time Capt. Palmer rode in on horseback to warn Col. Dennis of the approach of the Fenians. He stated that they would be there in twenty minutes.

Capt. King proposed that they should pile a barricade of cordwood on the *Robb*, then go aboard and keep steaming in the river and fight behind the cordwood. This suggestion was not acted on and in a short time the Fenians appeared along the top of the ridge that overlooks the village.

The Naval Brigade faced southward on River Street, one block south of the lower ferry wharf where the Robb was moored. They were near the corner on which stood Russell's machine shop. The Welland Battery was posted a few yards from the Naval Brigade facing to the west. Here these two companies were placed and allowed to stand, doing nothing to hurt the enemy and nothing to protect themselves. The Fenians extended along the ridge, some of them partly concealed in an excavated road. Still Col. Dennis gave no word of command but looking down his nose left his men to become targets for the enemy. A mounted Fenian officer waved a white handkerchief inviting the little party to surrender. And yet there was no move or word of command from either Dennis or Akers.

Then the suspense was ended by the Fenians opening fire. At this stage it was clear that Dennis would not do anything to give his men a fair chance to fight nor help them to escape from so unequal a foe. Instructor McCracken of the Royal Artillery said to the men of the Welland Battery "Boys, you had better take care of yourselves." This suggestion was at once acted on by both the Naval Brigade and the Battery and amid a hail of bullets the

two companies made down street towards the *Robb*. But the Captain of the tug, finding his prisoners getting troublesome, and fearing that the tug might be captured, cast off his lines and let the tug drift with the current. Some of the battery followed down the river bank, made good their escape. Sixteen of those besides Capt. McCallum were taken aboard the *Robb* and started for Port Colborne. As they passed up stream past Fort Erie, they received a heavy fire from the Fenians, the man at the wheel having a very narrow escape.

But to return to those on shore: some who were too late on the dock to board the *Robb* jumped into the river and climbed upon the timbers beneath the dock and remained there all night. Others went into the Lewis house and from the upper windows fired upon the enemy. Col. Bailey, U.S.A., and his horse were victims of these. Soon the Lewis house was closely beset and the walls were riddled with bullets, which caused an intolerable dust from the breaking of the plaster. The Fenians ordered the occupants of the house to surrender or they would burn the house. This demand was complied with and then they laid down their arms.

In this short fight there was some hot work. Before the evacuation of the Lewis house, Capt. McCallum and others of his company came out of the house. A Fenian pointed his rifle at the Captain, but one Thewlis, who stood beside the Captain, pushed his bayonet through the Fenian's neck, and saved his Captain's life. One member of the Welland Battery, who was a good shot, took shelter behind the pile of cordwood on the wharf and from this place he fired into the crowd of Fenians, as they came down the [illegible]. A little later, when a prisoner, he was marched past the place at which he had been firing and noticed five or six killed and disabled on the ground.

It seems a wonderful circumstance that with a force of ten Fenians to one volunteer, and at a distance of little more than two hundred yards, there was not a single fatality on the side of the volunteers. Five wounded was the total. Of these Captain King, John Bradley and Fergus Schofield had legs amputated, the others having flesh wounds. During the rush for shelter any hiding place whatever was utilized. Chicken-coops, pig-styes, etc. Col. Dennis found his way to Dr. Kempson's ash-house, from which he

reached the kitchen where he found sympathy. A kind-hearted domestic was willing to part with some of her outer apparel in a case of such dire necessity. But the Colonel's whiskers did not harmonize with the proffered garb. What was to be done? Must such a gallant pair of whiskers be sacrificed? Even so; a razor was loaned and with the disguise effected the Colonel made his escape under cover of the darkness and, as they say, saved his bacon.

A number of King's men had gone into the Lewis house and poured an effectual fire upon the Fenians. Among their victims was Col. Bailey, already mentioned, of the U.S. army, who lived till the following morning. His horse was shot from under him at the same moment that he was struck. The Fenians had surrounded the house and riddled it with bullets. The Fenians then ordered the party in the house to surrender or they would set fire to the house and shoot every man as he came out. It was useless to fight against such great odds and all, 30 in number, laid down their arms. In this action the loss of the Fenians was estimated at ten or twelve killed.

Those taken as prisoners by the Fenians were marched up to the old fort where they received a slice of raw pork and some soda biscuits for supper.

At about [illegible] p.m. Col. O'Neill collected his men and made an appeal for followers as if he had in hand some desperate undertaking. He and his braves were away for a period of two hours. It is the firm conviction of many that he intended to surprise Peacocke's camp, but finding the army's guards and pickets wide awake he abandoned the attempt. This belief finds corroboration in Col. Denison's narrative which states that the outposts of Peacocke's force heard those sounds, familiar to experienced ears, which indicate the proximity of a large force. On O'Neill's return to his prisoners he had them drawn up in a line as if he intended to have them shot. Some of the prisoners thought they were to be shot and told O'Neill that the field had a large number of Fenians—twice as many as he, O'Neill, had of Canadians and that if anything were done by O'Neill to his prisoners not a Fenian prisoner would be allowed to live. O'Neill's demeanor at once changed and he made preparations to embark.

About 1.30 a.m. a tug and scow came from Buffalo and took on board the greater part of the invaders. It would seem that

the Americans had kept a close watch on all that was being done, for the scow had hardly crossed the boundary when a shot from a swivel gun on the U.S. warship *Michigan* compelled the tug to stop. The scow with its cargo of adventurers was taken in tow by the *Michigan*, awaiting for some days orders from Washington. I believe that the greater part of Fenians made their escape from the scow while the authorities at Washington were deliberating on the course to pursue.

The prisoners taken by the Welland Battery and Naval Brigade were taken to Toronto and held for trial at the Fall court, four months later. During this period of waiting a wonderful transformation in the appearance of these men took place. When captured all were sunburnt, dust covered, unshaven and unkempt. Nearly all wore ragged clothes, while most conspicuous for the accumulation of dirt were shirts which showed no sign of ever having been in a wash tub. All this was changed by prison discipline and the sanitary conditions enforced thereby. There was none of the squalor so noticeable when captured. On the whole, with the loss of tan and the addition of prison uniform, identification was impossible in the majority of cases. Those walking the streets could not swear where they had seen them. As a result, nearly all were set free, less than a dozen receiving sentence of life imprisonment.

In 1872 the six then at Kingston were set free, much to the chagrin of the volunteers. To add to the annoyance of the volunteers, each Fenian received free transportation to Niagara Falls and in addition a five dollar bill with which to celebrate his liberty and make merry with his friends.

The writer was a member of the Welland Battery, but was present at Lime Ridge with two others of the same corps, and having been a spectator during the early part of the action and a participant when the Caledonia Rifles went to the front, he can speak positively as to what actually took place on the field. The facts relating to the action at Fort Erie were gathered from the writer's father, and from officers and comrades who were present.

I have spoken of the annoyance felt by the volunteers on account of the leniency shown to the Fenians who were made prisoners. A much stronger word than annoyance would be needed

to express the feelings of volunteers who had been in active service when the government of old Canada gave a five dollar bill to each Fenian set free in 1872. This unwarranted liberality was the less justifiable for the reason that the volunteers never received a cent more than their scanty pay, thirty-five cents per day. And the privates who were wounded received almost nothing. John Bradley, whose leg was amputated close to his body and who was completely disabled for life, received something like thirty-five cents a day. Fergus Schofield who had his leg amputated below the knee received twenty cents per day. We are pleased to note that a more worthy appreciation exists today.

Lessons of the Raid

The Fenian Raid was a great shock to the people of Canada, yet it was not without its useful lessons.

It proved that Canada, however well-behaved, was liable to attack—thus demonstrating the need of defence, and what was still more important the need of unity.

For two years the best men of Canada, including the leaders of both political parties, had tried in vain to bring harmony out of chaos. We had had a deadlock in parliament. Our representatives had not been able to pass any legislation. Various attempts to form cabinets had been made by different leaders without success. Stability was entirely lacking; the Brown-Dorion government lasted only three days.

Following two conventions of the Fathers of Confederation the raid gave a decisive impulse to the union movement.

Our leaders realized that party bickerings must cease before we could work out our destiny; that only through unity, harmony and co-operation could the foundation be laid. True, we have united the provinces with a girdle of steel to further our commercial interests, yet much more is needed to strengthen our sense of national and Imperial unity.

RECOLLECTIONS OF THE FENIAN RAID

WRITTEN BY N. BREWSTER, M.D., IN 1910

As the general history of the Fenian invasion is well known, I will confine myself to what came under my own observation.

In the well-remembered morning of the 2nd of June, the inhabitants of the village were attracted by the sound of whistling from a train from the west, the first in two days, and we soon learned the troops were here. We had earlier learned by courier of the approach of the Fenians from the north.

Profiting by my three years' experience in the great Civil War in the U.S.A., where I was often in battle, I soon learned our soldiers had nothing to eat since the day before, and I went along their line of march and asked our people to bring out for them all the cooked food on hand.

They responded liberally, and so many of the soldiers got at least a lunch.

I never learned who was at fault, but surely some one blundered, that men were sent into battle without food in this part of the country.

About an hour after the troops marched away, the sounds of battle so familiar to my ears, were heard, and I again went among the people and told them there was fighting going on down there, and there would soon be wounded to care for, and advised them how to prepare for their reception.

I then gathered up such of my surgeon's outfit as I had left, namely instruments, bandages, adhesive plaster, chloroform, a canteen full of whiskey, another of water, and started for the front. Just at the bend of the road to the north of the village, I met such a mixed and confused mass, as I have never seen elsewhere before or since. Soldiers and citizens, men, women and

children, on foot and in all varieties of vehicles, with horses, cattle, sheep and pigs, all mingled together, and all hurrying along the road south. It brought to my mind Russel's description of Bull Run.

I saw two soldiers without guns, running, and close behind them an officer with revolver in hand, crying halt, and firing at the men occasionally, but running as fast as he could, and close behind him, more soldiers running.

Soon after I saw that some of our men had taken possession of the buildings on the corners at the first cross road north of the village, then owned by old Mr. Joseph Damude, Uncle Joe as he was called, and were gallantly trying to hold the enemy in check, and how I wished there were even a few veterans tried in battle among them to hold them steady. But it was not long until I saw wavering among them, and soon they broke and continued their retreat.

Being now in the line of fire, I retreated to the left and made a circuit around the contending forces to the rear, and while in the fields, I heard shouting and firing, but paid no attention until I heard bullets whistling over my head, the other being the ordinary noises of battle. Then I observed they (the Fenians) were halting and trying to halt me, and call me in. I was soon among them and a prisoner. I was surprised to see that the only ones among them in any kind of uniform were those of the U. S. army. A Captain among them wore the full fatigue dress of his rank, who being asked why he had that on over here, he said he had not taken it off since the war. I told him it was time he did, as this was no place for it, and that I thought too highly of that uniform to see it used in such a cause, as I had myself worn it for three years.

The Canadian soldiers retreated through the village, and on to Port Colborne and we saw them no more.

The Fenians took possession of the village, and anything else they wanted, posted their advanced pickets at the cross-roads, on the hill west, then they settled down for rest and food, in some cases cooking and eating their dinners in private houses, even setting the table in my own house. They took very little loot beside food and did practically no damage to private property.

After waiting about three hours for orders or news, they retreated toward Fort Erie, and we saw them no more.

The Captain I have mentioned, on learning my profession and object, sent me on to the field, saying I was needed there, and that I should call on any Fenians I met for assistance, and I did so freely. I scoured the fields, roads and buildings, gathering in the wounded, all of whom I cared for, taking their names, rank, company and regiment, on my list, recording alike friend and foe, and at the close I soon had twenty-six names on the list, which I regret to say is lost.

Of these two Canadians were dead, and there were four Fenians dead, whose names I could not learn.

One of the Canadians died from heat and exhaustion in my presence, being not wounded, a student of the University of Toronto and a member of the University Rifles—brought in from the field while still living.

Of the five houses used as shelters for the wounded but two remain, namely, Mr. Asher's and Mr. Pierce's. One stood where Mr. Benjamin Weaver now lives, one at Mr. Bowe's, and one, the Smuggler's Home hotel, has not been replaced.

One of our wounded officers, thinking he was dying, gave me his sword and belt, gold watch, rings, etc., and exacted a promise from me that I should visit his wife, be the bearer of certain farewell messages, giving her all but the sword and belt, which I was to keep.

I afterward had the pleasure of returning all to himself in his wife's presence, except the messages.

A passing Fenian saw the sword and tried to take it from me, but I secured the assistance of a guard left on duty by their commander, who drove off the marauder, and I concealed the sword.

Our troops marched down the Ridge Road to the Smuggler's Home, on the corner formed by the Ridge crossing the Garrison Road, where they deployed into line reaching to and into the bush on the east, and a few rods below the hill on the west, and advanced across the fields and along the road to the north. They soon met the fire of the advanced Fenian picket, hidden in a clump of bushes in mid-field, which has only lately been cut down. I was told by our men that they were driving the Fenians back to their main line, and doing well, cheering as they went, sanguine of success, until the fatal blunder that ordered them into squares to resist,

cavalry which they obeyed, but instead of cavalry they found a line of veteran infantry, trained to service in many hard-fought battles in the American War facing them, who were quick to see and profit by the false move. They tried to get again into line, but being pressed fell into disorder, then broke and began their retreat. The exultant Fenians continued to advance and occupied a part of the enemy's breast-works, and in their retreat a number of them being cut off from the main body continued easterly until they reached the lake near Windmill Point.

I was assured by men living along the line of the Fenian march from Black Creek that there were but two mounted men in the Fenian ranks, and I could not but reflect upon the fitness for command of a man whose excited imagination could multiply two mounted men into a troop of cavalry. I was assured by many of our men, officers as well as privates, that all was going well and they were sanguine of success until that stupid order to meet cavalry which they saw did not exist, threw a pall on their spirits, and I have not spoken with one of the participants since who did not believe that was the cause of the disaster.

As to the number engaged, I estimated the Fenians a little more numerous than the Canadians, and a very large percentage of them were seasoned veterans, used to war and battle, while ours were to a man raw recruits, not one of them had ever before heard the whistle of hostile bullets, or as the phrase is, smelt powder.

The phrase "shot in the back" has a tinge of disgrace in it, but not always justly so, for one who has seen Ensign McEachren of the Queen's Own, observing that his men while crossing the fence and fields were in disorder, stepped boldly out in front, and turning and facing the men was trying to get them in line again, when he fell, dangerously wounded by a ball in the back, and which passing within an inch of his heart came out in front. He recovered and was living a few years ago and I have seen no report of his death.

I have never seen the Fenian loss reported, but I have seen four of their dead, and learned from people living on those roads that at least six wagons carrying dead and wounded were seen going toward Fort Erie, but I have never heard the number estimated.

Some of our less seriously wounded were helped in the retreat by comrades and given rides by our fleeing civilians, and I did not see them, but they were all properly reported.

The Fenian line was formed along the cross road by Athoe's, and they took the rails from the north fence, and placed them on end on the ground and the other resting on the south fence, and so constructed a very fair breast work and defence.

A home-guard was formed here in the afternoon of the day the Fenians came over with E. Morris, Esquire, now of [illegible] as Captain and mounted men armed patrolled all roads north and east all night and moved west with the returning troops but returned and again patrolled the roads and with a good degree of efficiency, a fact brought home forcibly to myself as they twice halted me on my rounds.

A good joke was circulated about them and their retreat to the effect that they established their headquarters at the north west of the Welland Canal so certain as defence doubtless they would have given a good account of themselves.

Very few of the inhabitants of the village remained in their homes, but went with the crowd and so gave the Fenians full liberty but they took very little from the houses, chiefly handkerchiefs, stockings and little items to keep as souvenirs. From mine what I most highly prized was the gold lace and insignia of rank from my uniform which I was keeping as a souvenir. Probably someone has it for the same purpose now.

An object of interest to the many visitors to the battlefield was for many years the marks of the bullets on the brick walls of the Athoe house.

A ROMANCE OF THE RAID

By George Wells

Every war has its stories of love and romance, and the Fenian Invasion on the Niagara Frontier in 1866 was no exception to the rule. This story as published below was discovered while rummaging through some old files of the *Welland Tribune* and is dated May 2nd, 1867. There is no signature to the story with the exception of the word "Post," as if copied from another newspaper.

A singular case of elopement occurred in the Township of Bertie about a week ago, which affords another instance of the proverbial blindness of love and the hasty, ill-advised actions which those influenced by the tender passion of love will at times be persuaded to adopt. In order to fully understand the affair we shall be obliged to refer to the events of the Fenian Raid of last June, in which the hero of the present narrative took a conspicuous part.

Patrick J. O'Reilly of Buffalo was a Fenian. He was a discharged American soldier, a saddler by trade, and an active and not bad looking young fellow of twenty-four years or thereabouts. Either from mistaken patriotism, love of plunder, rock oysters, or as Artemus Ward has it, "pure cussedness," P. J. joined the Fenian invaders, and on account of his military experience obtained a lieutenancy. He participated in the battle of Ridgeway, and at the close of the fight received part of his deserts in the shape of a ball in the side.

Abandoned by his pusillanimous comrades, he followed the retreating Fenians for some distance, but at last, faint from loss of blood, had just sufficient strength remaining to crawl to the door of a farm house about four miles from the Niagara River, and begged to be cared for and concealed from the red coats. The man

of the family were away from home at the time, looking after some horses which had been stolen by the Fenians—in fact one of the daughters was the only person left about the place. Taking pity upon the condition of the wounded man, and knowing that if her father and brothers found him in the house he would at once be handed over to the military authorities, she concealed him in an old disused barn at some distance from the house, assisted him to dress his wounds, and supplied him with food for about a week and until he was able to travel.

By her guidance O'Reilly then succeeded after much difficulty in outwitting the vigilance of the sentries and escaping across the river, probably considerably benefited by his Canadian experience. While the foolish girl had thus from a mistaken idea of sympathy been conniving at the escape of a criminal worthy of severe punishment, and unluckily for her, her compassion changed to love—probably sincere, though sadly misplaced.

After the departure of O'Reilly she settled into a deep melancholy, and her friends predicted an early death from consumption. Nothing was heard of the escaped Fenian until some time later, when an individual of much the same description—apparently a pedler—called at the farm house in the evening and asked for a night's lodging. His request was readily granted and he accordingly made arrangements for passing the night there, retiring early.

When the morning dawned, however, the pedler was gone—and the young lady also. The latter had been observed to be much affected and unable to conceal her agitation on seeing the stranger the previous evening. A couple answering their description were seen driving rapidly towards the Suspension Bridge on the morning they eloped, and a Buffalo paper a day or two afterwards contained the announcement of their marriage in one of the Catholic churches in that city.

The parents and friends of the girl are, of course, much grieved at the course she has pursued, and the unfortunate alliance she has formed. For this reason we suppress all names but that of the bridegroom.

We only hope the silly girl will never have cause bitterly to repent the match she has made.

SAM JOHNSTON: SMUGGLER, SOLDIER AND BEARER OF NEWS

By Louis Blake Duff

Mr. M. O. Hammond, who is the able "Bystander at the Office Window" of the Toronto Globe, lighted a fuse a year ago that was to illumine a curious and interesting incident of the Fenian Raid and to call up from well-nigh forgotten memories a most interesting and picturesque character long since passed from the local scene.

Mr. Hammond, while making one of those excursions of his in the wake of a camera, had heard a legend that one Sam Johnston had galloped up on that June morning bringing to Col. Booker and the detraining soldiers at Ridgeway news of the approach of the Fenian invaders. Mr. Hammond was curious as to the authenticity of the story and if it was true he wanted the facts. He wrote me a letter and as a result of it I published a brief article in the *Tribune and Telegraph* designed to uncover the ore if there was any.

Many letters followed from correspondents in the Ridgeway section and the general opinion seemed to be that Sam had long since joined the angels. The first suggestion that he was still wearing coats and shoes came in an anonymous letter from Stevensville. Here was the message:

Sam Johnston
Rock Creek, B.C.
This is Mr. Sam's address and he is very
much alive.

A letter was sent to the address given and brought back an immediate response from the redoubtable Sam. That response was as follows:

SAM JOHNSTON

Erstwhile Soldier Sailor Smuggler Customs Officer
Now a Gold Miner at Rock Creek
British Columbia

[illegible]
A [illegible]

Sam Johnston's Own Narrative

In answer to your request of 3rd inst. In the first place on Thursday night I was stopping at a hotel in Fort Erie, about midnight. Two parties by the name of George Neale and Geo. Stevens routed us up and told us a diamond trader from the American side notified them that the Fenians were landing their arms at the Blast Furnace dock to cross to invade Canada, and a body of men had marched down on us. So later I heard a horse coming up the street. I looked out and it was Corporal Nolan going to the Grand Trunk to notify Ottawa. I at once notified a family on the Garrison Hill, came back and took a double barrelled gun into Grant Warren's store and asked them to load it for me. I struck back across the commons and routed another family. I later met Mr. Dennison in company with John Douglas of Fort Erie.

To get back to the front street, the Fenians were to pass around a bend in the river and they gave me quite a fusilade. The bullets flew round me pretty thick. I noticed a picket fence ahead of me and I made for it and they ceased firing. I struck out to the upper end of the town and ran under the old railroad dock and passed under it until I reached the lower end. They were about a hundred feet below me. I stood under the dock and took an estimate. They were marching eight men to the column across. I counted the columns and there were one hundred and thirty-six. At that rate there were one thousand and eighty-eight men.

When they passed I ran back up to the old mill race and crossed on Douglas's Hill. The Fenians were forming on the commons below. I happened to drop my eyes to the bottom of the hill and I spotted two Fenians at the bottom with rifles and fixed bayonets. I struck back across lots until I came to Henry Bowen's. He had his team hitched up and the family was moving out. I told him I wanted a horse. He told me to take one. She was of Kentucky stock. I had the best bred horse in Welland County.

I went on out to Stevensville and got a doctor to go forth. My brother William started to go on the Bowen Road. The Fenians were located at the mouth of Dutchman's Creek on the new Ryan farm. On the way out Wilson Bowen went with us mounted, and Henry Bowen followed on foot. When we got to where the railroad crossed the Bowen Road we could see a heavy picket about a quarter of a mile ahead. We halted and pretty soon a picket of two men mounted and two men on foot with a flag approached within a hundred yards. I halted them and I asked them who they were and what they wanted. The reply was they were Fenians and they were going to take Canada. With that the two men on foot charged their rifles. I told the parties with me

that we had better 'get.'" They would take our horses as they were wanted and we were not. So we dropped back to Stevensville, and in the evening John Richardson went with me.

We went out the Bowen Road. We got close enough at times to hear them talking. All night they moved down the river. We kept on their track and in the morning, at Beck's Corners I stopped to get my revolver oiled up at the Main Street. A John Donohoe, and another party struck for the bush, and stated they were coming through the cedar swamp. I struck for the cross road leading south. When I made the turn, I saw one of their horse's noses. They ran me to Emmrick's Hill but my horse left them at every jump. Their main body was pushing on in the direction of the Ridge Road. My comrade, Mr. Richardson, jumped his horse across the fence and struck for the bush. I rode right down to Ridgeway. I crossed the rail road between the pilot of the locomotive and the locomotive with the nine cars of volunteers. They detrained on the north side of the train. I passed on to the north side and met James Morin, father of Colonel Morin. I asked which was the Colonel in command. I then approached the Colonel and asked if he was in command. He said he was, and I told him the Fenians were within two miles of us and coming this way. The first question was, "Have they any artillery?" I said "No." He then asked if they had cavalry. I said "No," and told him they had some men mounted but didn't have saddles and carried no swords. He asked me how many men they had. I told him fifteen hundred. I spoke to him then and used these words, "Why not ambush them?" He wore glasses and instead of looking through them, he looked over them, with the expression, "Are you in command or me?" He then asked if there were a Magistrate present. Squire Peter Learn, standing behind me, threw up his hand and said he was one. He asked him if he knew me and he stated he did. He asked if he could rely on my report. He said he could. He asked him then to go out and see what he could see and with him Alanson went, one mounted.

In less time than five minutes the bugle sounded. It was a very still morning. You could hear it for several miles. The Fenians were at that time a half a mile north of the Bertie Road. They marched to the Bertie Road and took up a position on the Bertie Road crossing the Ridge Road where they had a stone fence. At the same time they had John Angor's brick house on the corner and across the road on the opposite corner a big high log barn.

When I asked Colonel Booker to ambush his men on the north side of Ridgeway there was a big pine bush running east and west and a rail fence running the same direction and about two hundred yards above the Ridge Road there was a thicket of pine balsams, where one battalion could quarter.

The Fenians had no idea of meeting the volunteers there. They expected to meet them on the Welland Canal.

It was the Welland Canal that was their object. They collected at the Garrison Road. The Fenians' picket was on the Garrison Road and it was there that the battle commenced. They drove their pickets in and across to their main body, routed their main body.

The Fenians took up their position on the line fence between the Stoneman Farm and the Hoffman Farm, leading east and west.

When they took that position they had a number of horses picketed at the brow of the ridge, probably 20. When they fell back to their second position for every horse there they had there were three or four men. Colonel Booker seeing this move, sounded the retire, thinking they were going to make a cavalry charge. Booker sounded the retire and formed two solid squares to receive cavalry. The squares were not any more than formed when three men were knocked out of one of our squares. Booker lost his head and sounded the retire. The Queen's Own and 13th Battalion dropped back to Ridgeway and Port Colborne went. The Fenians followed up to Ridgeway, and then dropped back to Fort Erie in two bodies, one down the railroad and the other body by the Garrison Road. The body moved down the railroad with the intention of capturing the International Steam Ferry. But Captain May sighted them and steamed over to the American side, the body passing down the Garrison Road. When their rear body passed Lewis Palmer's place, a very old man struck across to the Bertie Road and then to Fort Erie, and notified Colonel Dennis who was in command of the Welland Field Battery and Captains King and McCallum who had been landed in the morning. All told they were fifty-six strong of both companies. Colonel Dennis ordered them up to the village school house, where in the morning they had captured 85 Fenian prisoners. Camp followers and [illegible] were brought down to the tug Robb and put down [illegible] under the deck.

Leaving nine or ten men on board of the Robb, he lined them up on a cross street. Then he had to go to see Dr Kempson, the Reeve of the town. The Fenians were coming on the brow of the Garrison Hill and commenced firing on this body. With this Captain King ordered the men to take shelter and fire as the Fenian horde came down on them. They captured 22 prisoners in Lane's house and marched them to the old fort as prisoners of war. Captain King was wounded and John Bradley, a man by the name of Hardison and a man by the name of Schofield. These I was acquainted with and I think fifteen others. There were several Fenians killed on Sunday morning at Fort Erie. I was standing on the sidewalk and could feel the planks jiggle. I thought it was a boy and didn't think any more about it. But all at once I

saw a man crawl out and I took a scrutiny of him and he had as fine a map of Cork as I ever saw and I nailed him. This same June 4th, on Monday, I was taking dinner at a hotel and there was an old Scotchman came in and called the Mistress in to an adjoining room and he requested her to let him have a boat that night to take a Fenian over the river. He said he wanted to get the devil away. I could overhear the conversation and I at once went out and notified two soldiers and went and got him. The following day I received word that one Michael Shea was wanted and I went into his place. When I went in he was sitting at a little cubbyhole and he jumped back from the hole and stuck on the lathing. He came right through, lathe and all and I took him down to headquarters. He had a horse and wagon and had been out foraging with a Fenian Corporal and guard among the farmers for supplies for the Fenian army. But he showed he was forced and was given his liberty. A day or two later I heard there were two deserters out of the Regulars and at once I struck out up the lake shore. When I got up about three miles I noticed a man ahead and I struck out for where I thought I would meet him. There was no man there. It was after dark. I noticed a rail fence running north from the road. I jumped over it and followed that fence a short distance and spotted him. I crawled over between the rails and nailed him and took him back to camp. When I got a short distance from the picket I met the other fellow between two colored ladies. The colored ladies had furnished him with a suit. He spoke to the fellow I had and the fellow's reply was "I am gone." I rushed this fellow in to the picket and struck back after this other one and another party got his hand on him about six inches ahead of my hand. They were court marshalled and got either three years and three months or four years and three months. They could have been shot for deserting in front of the enemy. Now I go back to Friday morning. Friday morning at 8.30 the United States Revenue Cutter *Michigan* ran down the rapids with Old Glory floating to the breeze with orders to anchor at the bridge and not to let any more over and not to let them back and at the same time they took a piece of the *Michigan* and mounted it on the deck of the tug *Harrison*. Then the tug *Harrison* patrolled the river. When they made their get-away they jumped a Canadian wood barge at Buffalo and poled her to one of the ports and got a tug that was up there to hitch on and tow her over to Fort Erie. There O'Neill had his force on the dock ready to board. They boarded this barge, landed his twenty two prisoners, shook hands with them and said good-bye stating he would come again.

As the tug started out in the stream the tug *Harrison* fired a shot across her bow and they were taken down astern of the *Michigan*. So it was settled between the U.S. Government and the

Imperial Government and Canadian Government as to what to do with them. They were landed after and shipped to their homes, New York, Boston, New Orleans, Saint Louis, Chicago, Cleveland and such. There were thirty thousand in Buffalo ready to cross. Their arms were stored in a Buffalo building and a number of years later it burned down with thirty-one thousand stands of arms in it.

This ended the campaign of '66. I was qualified in this way. First day in 1861 I went into the quarter-master's department, Washington, D.C., and on the first day of April, 1864, was transferred to the army of the Potomac, then lying on the Rappahannock in front of Lee's army and attached to the 50th New York Volunteer Engineer Corps. I was attached to the Second and Fifth Army Corps under the command of General Warren of the 5th and General Hancock of the Second, and Sheridan's Cavalry.

I saw all the movements of the army of the Potomac and Sheridan's Cavalry during Grant's campaign. This qualified me for the position I took in 1866, as Scout and Guide.

I could have taken one hundred men that morning, say fifty of the Queen's Own and 50 of the 13th and cut them to pieces and no doubt captured the whole bunch. I often saw men under fire, but I never saw men stand better than they did.

The time I was dismissed from the Customs the Anger brothers at Niagara Falls were in conversation with Dr. Ferguson and Dr. Ferguson admitted to them that McKenzie Bowell, Minister of Customs, said I was the most efficient officer on the force and was very much opposed to my dismissal. If the Anger brothers, editors of the *Niagara Falls Review*, are living, there is no doubt they will recollect the same.

This leaves me a prospector at Rock Creek, B.C., in my 81st year.

SAM JOHNSTON, EIGHTY-ONE YEAR OLD HERO OF THE FENIAN RAID, NOW LIVING IN HUT AT ROCK CREEK, B.C.

BALMORAL CASTLE IN THE ROCKIES

E. A. McKelvie in a recent article in the *Vancouver Province*, which has been widely copied, gives some interesting details about Sam. Mr. McKelvie writes:—

> In a hole scooped in the gravel near the river at Rock Creek, thirty-five miles from Grand Forks, B.C., lives an aged man. His home is not as large nor as comfortable as the kekwillies—or underground habitations—which the missionaries induced the Indians to desert half a century ago. The walls are composed of old scraps of driftwood, broken mine timbers and bits of packing cases, while

the roof is made of several old rusted pieces of corrugated iron, one of which is removed during the day to serve as a doorway and window. A farmer might use such a place for a root house, but he would refuse his stock in it—and yet it is the home of one of the nation's heroes, Canada's "Paul Revere."

Sam Johnston, still sturdy of build despite his 82 years, with keen penetrating eyes that flash with animation when he recalls the days of his adventurous youth, and a full, deep throated voice and merry laugh, is the occupant of this burrow. While time has failed to give the full advantage of four score years, fortune has dealt unkindly with him. The $15 a month pension he receives from the government is all the money he has for food and clothing. And he never complains of what fate has done to him.

Canada is commencing to study her traditions. Historical societies are springing up throughout the Dominion, and the story of the country is being examined by students, who see in the past a wealth of romance and wonderful power of inspiration. It was this new interest in the memories of other days that brought once more to light the part played by Sam Johnston when the Fenians raided across the border from Buffalo in 1866. Toronto papers gave publicity that the meagre scraps of information that could be gathered from the scattered survivors of those stirring times about old Fort Erie, and historical bodies discussed the incidents of the affair. But what had become of Sam Johnston?

Columns were written about Sam and his picturesque past—soldier, sailor, smuggler and customs officer at sea—but nothing definite could be learned of his movements the last quarter century until Sam himself wrote from Rock Creek denying much that had been said about him.

Possessed of a remarkable memory, a ready wit and keen sense of humor, he is a general favorite about Rock Creek. Little children and men and women treat him with respect, deplore his misfortunes and express appreciation of his character. Well read, his advice is often sought and his opinions given consideration on matters of discussion.

From the store house of his memory, beneath the willows that shade "Balmoral Castle," as he has dubbed his hut, he recently told the writer the story of that day in June, fifty-nine years ago when O'Neill and his wild Irishmen set out on their hare-brained expedition to capture Canada.

"I was at the hotel in Fort Erie," he explained, "when word came to me that the Fenians were loading arms on a boat at the blast furnace dock at Buffalo.

"There were so many rumors going the rounds that I did not pay particular attention to them, but still I did not feel easy. I went to my room and several hours later, about 2 o'clock in the

morning, I heard the beat of a horse's hoof and looked out and saw a mounted man. Then I knew that there was something to the story.

"I hurried out of the hotel after getting the alarm, and ran up the hill to warn a family living there. Then I turned and ran back across the common to tell another family. As I turned to retrace my steps I saw the Fenians coming. They were about two hundred yards from me. They saw me and opened fire. Three bullets cut through my clothing, one grazing my right arm.

I knew it would be of no value to find out how many there were, so, knowing the country better than they did, I ran, turning and twisting, until I was out of range. Then I doubled back and hid beneath a railroad trestle, which I knew they would pass. There I counted them as they came by only a few feet away. They were marching in 138 ranks of eight men each.

About three miles away lived a man named Benner, who had a fine Kentucky blooded horse, the fastest in the country. I made my way towards his farm, warning everyone along the way. I told Benner about the Fenians and asked him for a horse, saying I wanted to carry the news along the roads and to the soldiers. He at once gave me Tib, the Kentucky horse, and away I started.

I was joined a little later by my brother and two other men. Soon we came on a Fenian picket of two mounted men and two on foot. We halted about two hundred yards from them. The dismounted men had fixed bayonets. I called out: 'Halt, who are you? What do you want?'

"We are Fenians, and we've come to take Canada,' was the answer.

As they gave answer the two men with muskets started to load, so we turned and went back. I was the only one armed. I had a big American army revolver but it was rusty.

"We got round to the flank of the main bunch, and we kept scouting about them until morning was well along. I was getting my revolver oiled by a blacksmith at a crossroads shop when I looked up and saw six mounted Fenians behind me and three in front. I jumped on my horse and made a dash past as they tried to get me.

Up a hill we went, my animal running away from their slower beasts. Why they didn't shoot me I don't know, for I was close enough. They did fire, but while the bullets whistled around me none hit me or the horse either.

As I touched the railroad track at Ridgeway the pilot engine of the troop train was coming in, followed a few yards behind by another engine with nine cars full of troops. I took a chance and headed for the tracks, pressed my knees to Tib's side and the horse cleared the tracks at one bound, right between the pilot engine and the one following.

A few minutes later Sam said he had told the colonel in command of the incoming troops that the Fenians were within two miles of the town. Both sides lost several killed and wounded in the battle that followed. The Fenians later in the day seized old Fort Erie, which had not been used since the War of 1812, or thereabouts. The Fenians, however, wired all over the world that they had invaded Canada, and had captured Fort Erie. They didn't tell what it was like, and people who did not know thought it was a second Gibraltar.

A newspaper reporter got the Fenians out of Canada. He was from a New York paper and he went through the lines to the fort and told O'Neill that five thousand Canadian soldiers were coming.

The Fenians then went out, captured a barge and tug, loaded their men on the barge, released their prisoners and sailed away. O'Neill was arrested by the United States marshall when his 'army' crossed back into the United States.

That did not end the war, however, for Sam Johnston, for the Fenians learned of the part he had played, and sent word that "the next time the Fenians invade Canada they will bring your head back to Buffalo on a pole."

Several years later Sam went to work as a driver on the horse cars at Buffalo. There was a notorious Fenian bully named Jim Lyons, a man who weighed 248 pounds. He threatened that he would "get" the young Canadian, but Sam was a considerable fighter himself in those days.

This particular Fenian attacked Sam on the car one night and got the surprise of his life, for Sam floored him.

A few days later, with eight companions, he lay in wait for the driver at the end of the line and attacked him. In the fight which followed Lyons received such a pummeling that he died from the effects of his injuries a few months later.

Many an [illegible] Sam [illegible] in the old smuggling [illegible] on the Great Lakes. Whisky could be bought for one or two shillings a gallon in Canada and sold for several dollars in Buffalo, while coal oil purchased in Buffalo for 4 to 8 cents brought three or four times as much in Canada.

When the national policy was introduced and the Canadian customs was enlarged Sam was appointed inspector for his district. He is proud of the record he established during the three years and ten months he wore the uniform of the customs and of the seizures he made.

Sam Johnston came to British Columbia in 1898 and for the last twenty-five years has been mining in the interior. He lost his savings in an attempt to recover gold from the Kettle River just above the mouth of Rock Creek. For many years he had

losses on the river beach. He still thinks there is gold in plenty in the creek which occupied the miners of the '60s when Rock Creek had a population of five thousand. Today less than a dozen houses make up the community. And one is "Balmoral Castle," where lives the hero of Ridgeway.

SAM JOHNSTON'S RIDE REMEMBERED BY AN ONLOOKER

THE writer is indebted to Brig. Gen. E. A. Cruikshank of the Historic Sites and Monuments Board of Canada, Ottawa, for the following letter which contains interesting reference to the part played by Sam Johnston in the Fenian Raid.

I well remember the first time I saw Sam Johnston. It was on the morning of 1st June, 1866. I was then not quite twelve years of age. When I was aroused that morning from a very pleasant sleep by my father about six o'clock, he informed me that the Fenians were over and he wished me to go with his ploughman, John Bonner, and take away his horses, of which he had about a dozen, to some place of safety. We took a very hasty breakfast and set off with a buggy and a light wagon and a string of lead horses. We had no instructions except to warn my brother-in-law, who lived about two miles distant, and then place the horses somewhere out of reach of the invaders. From his knowledge of proceedings of the Confederate raiders in Pennsylvania my father thought it probable that the first act of the Fenians would be to impress all the horses they could find, which was actually the case as they commandeered fifty or sixty in the immediate neighborhood of their landing point.

We drove westward on the Garrison Road to the road between the Fourth and Fifth Concessions N.R., then turned north and made the first stop at the house of my brother-in-law, P. E. Miller, where we acquired another string of horses with another driver and carriage. We then went northward on the same road until we came to the [illegible] end of the Bowen Road, where fifteen or twenty men and boys had assembled. All were unarmed except one man who had two shotguns. We halted to give and receive news.

In a few minutes a horseman came galloping toward us along the Bowen Road from the direction of the river. He was bareheaded and his hair was long and tangled. He wore a long light brown overcoat which was spotted here and there with dried mud. Somebody recognized him and said he was Sam Johnston, the smuggler. When he reached the group he had a terrifying tale to tell. Fifteen hundred Fenians had landed and they had 150 pieces of cannon which seemed to me even then rather out of proportion to the number of men. They had killed Dr. Kempson, the Reeve of Fort Erie, and all the lookout party of the Royal Canadian

Ridge. My recollection is that he said he had seen three dead bodies. As he was riding down the river road the Fenians had fired at him and he exhibited holes in his overcoat, which he said, had been made by their bullets. He would hardly have escaped had not the *Michigan*, a United States revenue cruiser, come down the river at that moment and swung her broadside round in a threatening manner, which diverted the attention of his pursuers.

Not all of these statements were, of course, verified in the future, but no one ventured to question their truth and the group hastily dispersed. We turned westward and travelled with considerable speed without any very definite objective except to get out of the way of the bloodthirsty raiders. The roads were dry and hard and the weather was calm and sunny. On the road ahead of us and behind us and on parallel roads we could see carriages and lead horses travelling in the same direction. We met none going the opposite way. Opinion seemed to be unanimous as to the proper course to take. We kept on until some time in the afternoon we reached Timothy Hunt's carding mill near Stevensville. I cannot remember why we went there, but it was a tolerably secluded place with plenty of shade and stable room and hay for the horses. Here there was a large mill-pond and three houses, one of which, fully furnished, was unoccupied, and we were told that we might lodge there. About twenty women and girls were collected in the largest house, but the men were all away trying to obtain news.

My rest that night was broken several times by the sound of stray shots and galloping horses, which seemed alarming and were never explained. About eight o'clock next morning while standing beside the mill pond I heard a few shots in the direction of Ridgeway, which soon became a steady roll of musketry. We then knew that fighting was going on and six or eight of the men saddled horses and rode off towards the sound. Before the fight had reached its crisis this group of horsemen arrived on a jog in the road in the low ground west of the Ridge Road, some distance to the rear and right of the Fenian position, where unfortunately they were sufficiently conspicuous to be seen and gave color to the alarm of "cavalry." From this point they had a good view of both firing lines and remained looking on until the retreat began. In about two hours they returned to the mill with the news that our troops were beaten—they had seen them running. I do not think I ever felt more depressed for in my childish ignorance I never supposed it possible that British troops could ever be defeated. We had no alternative but to resume our inglorious retreat with the accompaniment of as many young women and girls as we could convey. I was driving the buggy and much to my confusion was asked to take a girl a little older than myself. I was desperately shy and I

doubt whether I spoke a word to her on the whole journey. Somebody suggested that we should take refuge at a certain house in the Short Hills, where our herd of horses would be secure and this proposal was adopted. I believe the owner of the farm was a relative of the Hanna. We passed through Welland in the afternoon where we heard all kinds of alarming reports and I overheard some strongly disloyal remarks from an Irish [illegible] on the bridge which did not raise my spirits much. We reached our destination before dark to find the house crowded with other fugitives. We deposited our load of ladies there, fed our horses and ourselves the best way we could, and slept in the hay in the large barn very comfortably.

Early next morning we heard that the Fenians had left the country and we began our return. Some time about the middle of the afternoon we arrived at New Germany where a small military camp had been formed by a party of the 47th Regiment. I had then become the driver of the democrat wagon and team of horses and was impressed by a civilian. I demurred and was told very insolently that I must obey. I still objected when an officer, Lt. Lloyd, came up and explained very politely the necessity of having the wagon and team. This soothed me considerably and I said of course I would be glad to assist them. Four soldiers of the 47th and three miserable prisoners were crowded into the wagon and I drove to the camp on the heights overlooking the village of Fort Erie at a walk, arriving there after dark. On the way the escort amused themselves by informing the prisoners over and over again that they would be shot in the morning. Such are my reminiscences of the Fenian raid, which I remember much better than many later events of more importance.

A STORY OF NATURAL GAS IN ONTARIO

By D. A. Coste

The history of natural gas in Ontario commences thirty years ago. While small quantities had been found prior to 1889 in wells drilled for oil and for water, or were known to be coming out in natural springs from the ground in several places in the Province, it was on the 23rd of January, 1889, that the first production in commercial quantities was struck in a well located on the north-west corner of Lot No. 7 in the 1st Concession of Township of Gosfield, in the County of Essex (you see our forefathers had almost struck the nail on the head in naming that Township). This well, which was drilled to a depth of 1032 feet, was found to have a capacity 24 hours after the completion of a little more than 10,000,000 cubic feet per day, and its rock pressure was 420 pounds to the square inch; and may I not be allowed to take a little pride in what I may call this discovery, not for myself—I was a mere newspaper man at the time—but for my brother, Mr. Eugene Coste, who located the well (in the very county in which he was born) and who formed the syndicate which drilled No. 1 well, and which afterwards became the Ontario Natural Gas Company.

The drilling of other wells by this Company quickly followed with varying success, all the good wells in the field being found within the [illegible] area contained in a triangle which had No. 1 well as its north-west corner, a point on Lake Erie 1 3/4 mile south of No. 1 and 2-1/2 miles east of Kingsville as its south corner, and Sea Cliff Park, south of Leamington, [illegible] miles from No. 1, as its south-easterly corner, the base of the triangle being therefore all along the shore of Lake Erie. Some 90 or 100 wells, if my memory serves me rightly, were drilled by this Company in the Essex field.

The gas was for two or three years used only in the nearby

towns, via Kingsville, Ruthven and Leamington. In 1894 some 30 wells or so having been completed, an 8-inch pipe line was laid to Windsor, and gas was supplied to that city and to Walkerville and Sandwich. A year later a pipe line was laid across the Detroit river and gas was sold to the residents of the city of Detroit. This marked the first extravagant use from wells in Ontario of this precious fuel, which was followed two years later by a supply being sent to Toledo through an old line which had previously been laid from the city of Detroit. It is almost needless to say that the field, while it had a number of large gassers, did not cover a sufficient area to warrant the enormous pull put upon it, and in 1904, after a series of constantly lowered pressures on the wells, the gas rock was found to be badly invaded by the salt water immediately below it, and the first natural gas field discovered in Ontario was abandoned. In those days the operators did not have the means which are at hand today to take care of the water. The places supplied on our side of the river had to go back to manufactured gas.

This field, since it is no longer a producer, does not interest us as do the others discovered afterwards.

To complete the history of the production of natural gas in Essex I must state that in addition to the field referred to above, a nice little pool of gas was also found in the Township of Mersea, about a half mile north-east of Leamington and some producing wells were also drilled at the north end of Point Pelee, but the life of these wells was of short duration. A number of dry holes have also been drilled in different parts of the county, viz.: several north of Comber, from which some oil was obtained; one west of the Village of Tilbury; several in the southern part of Mersea Township; a deep well in the vicinity of Olinda; two or three in Maidstone and in Rochester; one at Essex; two in Colchester Township; two near Amherstburg; and a few more, the location of which I do not really know.

The history of the Welland field is now in order. It, as its predecessor, is also 30 years old, but with the difference that although pretty anæmic, it is still alive.

The first operation in this field took place in May, 1889, when a syndicate organized by my brother and myself leased a large acreage of land for oil and gas, and located No. 1 some seven miles

east of Port Colborne, on Lot No. 35 in the 3rd Concession from Lake Erie, in the Township of Bertie. In the following August this well was completed with a flow of 1,700,000 cubic feet of gas per day, in the White Medina sandstone, at a depth of 836 feet, with a rock pressure of 525 pounds to the square inch. The Provincial Natural Gas and Fuel Company of Ontario, Limited, was then organized (and with a name of such length, how could the gas field do less than have a long life?). Development of this new gas field, as it quickly turned out to be such, was actively pushed, and in the fall of 1890, after 25 wells had been completed, an 8-inch pipe line was laid in an easterly direction from the then centre of production, to the Niagara river, a distance of about 18 miles, for the purpose of supplying gas to Buffalo, it having been impossible to raise money in Canada for the lines to reach distant Canadian towns; moneyed men feared the gas would play out. Three lines, one 8-inch, the other two each 6-inch, were laid across the river, and in the winter of 1890-1891 gas was first sold to the Buffalo Natural Gas Company (now the Iroquois Natural Gas Company) for distribution to a portion of its consumers. Buffalo had been supplied with natural gas from the Bradford field some 80 or 90 miles distant for some 4 or 5 years prior to this time. The Village of Bridgeburg was piped by the Provincial Company at this time. In 1891 the Erie County Natural Gas Company, a Buffalo Company, having secured some territory and drilled several wells, also laid an 8-inch pipe line to the Niagara river, and two 6-inch lines across the river to Buffalo, where for a few years it supplied a small part of the city, where it had a plant formerly fed by a few small wells in the north end of Buffalo itself. The Village of Fort Erie was at this time piped and supplied with the natural gas by this company. A few years later the Erie County Natural Gas Company's holdings in Welland County were purchased by the Provincial Company.

In the meantime the Bertie Natural Gas Company had been organized, and had drilled several wells and piped the Village of Ridgeway which is to this day still using natural gas.

The Mutual Natural Gas Company had also been organized at Port Colborne, and had met with immediate success in their wells west of this village, the gas being piped to Port Colborne. How-

berstone Village, and to Welland. Some fifteen years later the Mutual Company sold some of its wells and its Welland plant to the Provincial Company, the remaining wells and the plant at Port Colborne being transferred to a new company, the Sterling Natural Gas Company, which is still doing business under the able management of Mr. C. E. Steele.

In the Fall of 1905 the export of natural gas to Buffalo having been stopped, the Provincial company laid an 8-inch pipe line to Niagara Falls, Ontario, and piped the city. The head office of the company is located there.

Gas was found in our Well No. 1 at a depth of 836 feet, but the White Medina is not the only source of supply in the Welland field, as in many wells to the north of where the original first wells were drilled, gas was found in the Clinton limestone, this formation being about 20 feet above the White Medina. Some gas has also been found in a few wells on Point Abino, at the southern extremity of the Provincial field, in the Guelph and Niagara limestone, from 200 to 300 feet above the Clinton. This gas contains a small percentage of sulphur. A little gas is occasionally found in the Red Medina sand, and in three deep wells, one of which was drilled by the Provincial Company to the granite to depths of from 3030 feet to 3410 feet, a little gas has been struck in the Trenton and in the Potsdam.

The Provincial company has up-to-date drilled and purchased 466 wells, which are located in the Townships of Bertie, Humberstone, Willoughby, Crowland and Wainfleet, all in the County of Welland. To this number of wells must be added from 150 to 200 more drilled by other companies and individuals in the Welland field.

We now come to the very considerable production of natural gas which has been developed in what has been called the Haldimand-Norfolk gas field, and which has of late years been extended into the east part of the County of Elgin, and also into the County of Brant. The wells in this field have not been found to be as large as in some other fields in Ontario, but far many more of them have been drilled over a larger area than that covered by other fields.

Following closely upon the discovery of natural gas in Welland County, the first wells in this field were put down in the winter of

1889-1890, in the vicinity of Caledonia and at Dunnville, and while not large, these wells gave sufficient encouragement for the drilling of others. It was but a short time after the drilling of the two wells just mentioned, when many small operating companies engaged in drilling, but it was in 1905 that the Dominion Natural Gas Company, then composed mostly of Pittsburg gas men, came into the field, and having leased a large acreage, drilled a considerable number of wells, and in the same year laid a line to Hamilton.

In 1906 the Manufacturers Natural Gas Company laid a line from Selkirk to Hamilton. This company had no gas of its own at the time, but purchased its supply from local operators, and sold it in Hamilton for industrial purposes.

The Dominion Natural Gas Company, through itself and its affiliated companies, is by far the largest operator in what I will call the Haldimand field for short. This company, which was later purchased by the H. L. Doherty interests of New York, has to date drilled and purchased 1,179 wells, 393 of which either came in dry or have been abandoned, leaving 786 wells still on the line.

Besides the gas obtained from its wells, the Dominion Company purchases a good deal of gas from a number of small operators. Gas is sold in Hamilton, Brantford, Dundas, St. Catharines, Dunnville, Cayuga, Galt, Simcoe, Tillsonburg, Paris, Port Dover, Port Rowan, and in a number of other towns and villages, and throughout the Townships through which the pipe lines are laid. Some 22,500 consumers are supplied direct by the company and its subsidiary companies, and in addition gas is sold wholesale to the United Gas and Fuel Company of Hamilton, who in turn retails it to about 20,000 consumers.

The wells throughout this field vary in depth from about 600 feet at the northern end of the field to about 1400 feet in the southern part, and gas is obtained sometimes in the Clinton, sometimes in the Red Medina, and also in the White Medina.

As I have stated above, a number of companies and individuals are operating in the Haldimand field, and while I cannot mention them all, I will give the names of some of the principal ones. The Warner-Root Gas Company have drilled a number of wells in the Townships of Cayuga, Rainham, Dunn, Canborough and Walpole. Lalor, Aikens and Smith have put down wells in Dunn, Sherbrooke

and other townships. F. L. Sussey, one of the old drilling contractors, has also put down a good many wells for himself and others. The National Gas Company has also operated quite largely in several townships, as also the Producers Natural Gas Company, the Helton Gas Company, the Port Colborne-Welland Natural Gas Company, the Standard Natural Gas Company, The Medina Natural Gas Company, and others, and practically all towns, villages and hamlets in the several counties I have mentioned are supplied with natural gas.

The next and last natural gas field of importance in Ontario, which may well be called the best, is located in the County of Kent in the Townships of Tilbury East, Romney and Raleigh, and usually known under the name of the Tilbury field.

The first well in this field was located on the Kerr farm, Lot No. 10, Middle Road North, Tilbury East Township. It was drilled by the Acme Oil Company of Detroit and completed in December 1905 with a flow of about 40 barrels of oil per day and a volume of gas estimated at a quarter of a million cubic feet per day. Those of us who were in the business at the time will remember the excitement which prevailed. Syndicates and companies were formed over night and in a short time many wells had been put down, a number of which produced a considerable quantity of oil. These wells were almost all located in a northerly direction from the Kerr well for a distance of about 3 miles. In but very few exceptions flows of gas were struck in these wells varying from [illegible] to 300,000 cubic feet per day, but no attempt was made to save the gas, and it has been estimated that one or two billion cubic feet of gas were wasted from the mouths of the wells in order that the oil might be freely gotten out.

It was in the late summer of 1906 that well No. [illegible] on the Halliday farm, a short distance north of Fletcher, drilled by a syndicate which I had formed, was completed. This well came in good for 6,000,000 cubic feet of gas per day, and while not in what is today the gas field, was really the start of the natural gas business in Kent County. The Volcanic Oil and Gas Company was then organized and a 3-inch line was laid to Chatham, and in March 1907 the first gas was put into the mains of the Chatham Gas Company. Within two or three months, however, it was found that this well

was quickly turning to oil, and two other wells of the company which had just been completed, south-east of the Kerr well, were hurriedly connected to save the situation.

In the meanwhile the Leamington Oil Company of Detroit, alias the Canadian Gas Company, had brought in a well good for some 7,000,000 cubic feet of gas at the northern end of Lot 185, Talbot Road Survey, some 7 miles almost due south of the Kerr well, and again considerable excitement prevailed. Several companies rushed into the field, among them the Volcanic Oil and Gas Company, the United Fuel Supply Company, the Ridgetown Fuel Supply Company, the Rondeau Oil and Gas Company, the Maple City Oil and Gas Company, The Beaver Oil Company, The Holliday Syndicate, and others. A number of good wells were quickly put down, and competition for the securing of the available markets ensued. In the late summer of 1909 the Volcanic Company having made a contract to sell gas to the Windsor Gas Company for distribution in that city, laid a main line, half 8-inch and half 10-inch, to Windsor, a distance of a little over 40 miles. This company's line to Chatham had prior to that time been changed to a 6-inch. Now it is an 8-inch for almost the entire distance of about 22 miles. At about the same time as the Volcanic Company entered Windsor, the United Fuel Supply Company and its associates, the Ridgetown Fuel Supply Company and the Rondeau Company, having made a contract to supply Sarnia with gas, laid an 8-inch line to that city, a distance of about 60 miles. The Beaver Company shortly afterwards laid a line to Leamington and Kingsville, and again these two places, the first to be supplied with gas in Ontario from the Essex field, were enjoying the benefits of a natural gas supply. A line was also laid by the Northern Pipe Line Company to Wallaceburg. This company obtained its supply of gas from the Leamington Oil Company. Another line was laid by the Ridgetown Fuel Supply Company to the Village of Ridgetown, and as far east as Highgate. The Volcanic Company at about the same time laid a line to Blenheim to supply that village.

With all these companies in the field, each one of which was bidding for business, franchises were obtained and contracts were entered into for the sale of gas at prices far below the proper rates at which natural gas should ever have been sold, and enormous

were resulted for the Gas Companies, while the cities, towns and manufacturing concerns supplied benefited greatly.

It was on January [illegible], that for the purpose of better conservation of the field, the Union Natural Gas Company of Canada, Limited, was formed. This company amalgamated all the interests of the Volcanic Company, the United Fuel Supply Company, the Ridgetown Fuel Supply Company, and the Rondeau Oil and Gas Company, and controlled by contract the supply of gas of the Canadian Gas Company to the United Company and to the Northern Pipe Line Company.

In 1913 the Glenwood Natural Gas Company, a new-comer financed by American capital, having acquired the field holdings of the Maple City Oil and Gas Company, and purchased the Beaver Oil and Gas Company, started the drilling of a number of wells in the field, several of which were put down in Lake Erie, a few hundred feet from the shore. In the same year the Southern Ontario Gas Company, which was a pipe line company, laid a [illegible]-inch pipe line all the way to Hamilton, a distance of approximately 150 miles, and the gas conveyed by this company, which is purchased from the Glenwood Company and the Beaver Company, is sold to the Ingersoll Gas Light Company and the Woodstock Gas Light Company, who retail it respectively to the residents of Ingersoll and Woodstock. The Southern Ontario Company also sells gas to the Manufacturers Natural Gas Company at Hamilton for distribution there, besides selling gas direct at Dutton, Rodney, West Lorne, Highgate, and a number of other places, including a few consumers at London.

The gas in the Tilbury field is found in the Onondaga and the initial rock pressure was about 600 pounds to the square inch.

To the operations of the Union Company in the Tilbury field I now must add what this company and others have done in the way of deep drilling in what is known as the Dover field, located some 12 miles or so south-west of Chatham. On May 13, 1917, a well was brought in in the Trenton limestone on Lot 3, Concession 3, Township of Dover West, at a total depth of 3085 feet, good for 6,500,000 cubic feet of gas. The Trenton had been struck at 2883 feet and five distinct pays of gas were encountered from 2965 feet to 3160 feet, at which point the water of the gas was found

This well which had a rock pressure of 1125 pounds to the square inch, showed a little spray of oil, and again excitement prevailed. The Union Company has since the drilling of the first well completed 12 wells in the Dover field, two of which are producing gas only, while four others are producing both gas and oil, the remaining six wells having come in dry; two of these dry holes were drilled down to the granite to depths of 3765 feet and 3735 feet. Besides the wells of the Union Company, several other deep wells have been drilled in Dover, some three or four of them notably by the Central Development Company, but in all cases failures have resulted, and the large new field which was hoped for has not materialized.

I have given you a lengthy story upon the finding of gas in the four principal fields in this province, but even at the risk of trying your patience, and to make the history fairly complete, I must speak at some length of the gas which was found a few years ago near Oil Springs. In 1914, Dr. Fairbanks of Petrolia drilled in a well south of Oil Springs, in the County of Lambton, at a depth of about 300 feet, which actually measured at the mouth of the well some 30,000,000 cubic feet of gas, with a rock pressure of over 800 pounds to the square inch. This was the biggest well ever drilled in Ontario, and naturally attracted a great deal of attention. The Union Company and several other companies and individuals then started operations in the neighborhood, and some thirty wells were drilled within a radius of five or six miles, but with poor results indeed, one well only, that put down by the Oil Springs Oil and Gas Company within 300 feet of the Fairbanks well, being a really good well.

The Union Company having made an agreement to purchase the gas from the Fairbanks well, laid a 6-inch line to Petrolia, a distance of 12 miles, which also was connected with the Sarnia line of the company, but within three months the gas in this well as in that of the Oil Springs Company's well had practically petered out, the pressure having gone down to 40 pounds. The Union Company in the end had expended over $100,000, and had come out at the thin end of the horn, and there were others.

Many wells have been drilled in other parts of Ontario, but unfortunately the results were of little or no value, and many dry holes have resulted.

I will now give you some figures to show the very large amount of money which has been invested in the natural gas business in the province. These figures should encourage everybody that natural gas has played a very important part indeed in the rise and prosperity of many people. They surely show that every effort should be made so that the business may be kept going as long as possible.

The following is a close estimate of the wells which have been drilled.

	Wells Drilled	Wells now Operated
Essex field	175	1000
Welland field	700	500
Dominion Nat. Gas Co.	1181	784
United Gas Co	115	41
Beaver Company	64	23
Glenwood Company	91	77
Utica Company	203	149
Canadian Gas Co	43	42
Miscellaneous	330	
Totals	2983	2401

You will see by this table that 1400 wells out of the total number drilled are still being operated which means that 1505 wells have come in dry or have been abandoned.

The 1503 wells drilled I have averaged at a cost of $2,500.00 per well, giving in the sum of $3,415,000.00

The following is a close estimate of the main lines and field lines which have been laid to convey to the markets the natural gas from the several fields

	Cost Main Lines	Cost Field Lines
	£ 90,000	
Essex field 60 m lin	$ 450,000	$ 150,000
Welland field 50 miles	700,000	300,000
Haldimand field 252 miles	2,220,000	1,480,000
United Gas Co. 27 miles	225,000	75,000
Beaver Co 34 miles	260,000	65,000

Southern Ontario Co. 130 miles	1,250,000	
Glenwood Co.		175,000
Union Co. 205 miles	2,400,000	300,000
Miscellaneous 60 miles	350,000	300,000
Totals	$7,835,000	$2,725,000

You will see by this table that the very large amount of $10,560,000 has been expended in the laying of pipe lines.

The following amounts are also closely estimated to have been expended before the natural gas has reached the consumer:

City plants served with natural gas and service lines	$6,500,000
80,000 meters at $12.00 each (average)	960,000
Paid in rentals for wells	1,500,000
Compressor stations	600,000
Miscellaneous other outlay	2,000,000

All of the above, which is more likely to be under the mark comes to a total of $30,535,000.

I have also closely approximated the number of meters in use at 80,000 which means, figuring on 5 persons to a family, that 400,000 men, women and children in the Province of Ontario are enjoying the benefits of natural gas in their homes at the present time.

NATURAL GAS DISCOVERED WHEN PETROLEUM WAS SOUGHT

By George H. Smith

This data I have present on the history of natural gas in the County of Welland is from records and information gathered from the citizens of the county.

Outside influences often change lines as well as industries, from the path that they originally began. The natural gas industry is no exception to the rule, and without the petroleum industry the natural gas industry would perhaps never have been born.

Petroleum was discovered and used ages ago. It is recorded that the people of Babylon and Nineveh used it 3,000 years before Christ. Pliny described the oil Agrigentum brought from the island of Sicily and burned in lamps by the Romans about the time of Nero. Marco Polo, during his travels in the thirteenth century, discovered the fire temple at Baku in the Caucasus, the home of the ancient fire worshippers, whose shrine was a burning spring, the fire from which was not extinguished until the drilling of wells in later years, drained the supply of petroleum. The people of Persia, Arabia, China and India utilized petroleum in its crude state, taken from springs.

The discovery of oil in North America can be credited to the Seneca Indians, who found it in the form of an oily scum floating on the surface of ponds and streams. It was utilized by them for medicinal purposes and their method of obtaining it was by means of a blanket soaked in the fluid and then wrung out. About the first record of petroleum in America was in a letter written by Joseph de la Roche Daillon, a French Missionary in the year 1629. Later in 1750, the commander of Fort Duquesne mentioned the springs at Oil Creek in a letter written to General Montcalm.

In 1775 George Washington dedicated to his country as a national park an acre of land which he had pre-empted located in West Virginia containing a burning spring. This too was leakage from crevices in the ground.

Petroleum and natural gas were both found in the salt wells drilled along the Kanawha River in West Virginia, about the year 1815. It is recorded that the first producer of petroleum in America was Hiram Hill of Titusville, Pa., who gathered and barrelled seepage oil along Oil Creek and shipped it to Pittsburg, Pa., on rafts. Dr. Kier of Pittsburg was perhaps the first oil refiner in America, for he successfully distilled some oil taken from salt wells at Tarentum, Pa., in 1850, nine years before Col. Drake drilled his famous first oil well at Titusville, Pa.

In the year 1812 the Gas Light and Coke Co. of London, Eng., obtained a charter to supply artificial gas to that city. William Murdock was the inventor of coal gas and lighted his home with it in the year 1792. He was connected with the above mentioned company when they first applied for their charter, three years before it was finally granted. At the time of the first application before the House of Parliament a great deal of ridicule was directed toward Mr. Murdock and his company.

Natural gas was first observed in the United States in the burning springs, so called, that were found in many places in the Appalachian Mountains. The first attempt to utilize this fuel commercially was at Fredonia, N.Y., in the year 1825. While removing an old mill which stood partly over the Canadaway stream, some bubbles were observed to break frequently from the water, and on trial were found to be inflammable. A company was formed, and a hole an inch and a half in diameter being bored through the rock, a soft limestone, the gas left its natural channel and ascended through this. A gasometer was then constructed, with a small house for its protection, and pipes being laid, the gas conveyed through the whole village. About one hundred lights were fed from it and sold to the consumers at one dollar and a half yearly each. The gasometer used, collected about eighty-eight feet in twelve hours during the day.

After the completion of the Drake Well in 1859, oil companies and oil wells sprung up very fast in Pennsylvania. Matthew R

chardson of Port Colborne made a trip to Titusville and on his return was evidently instrumental in forming a company and commenced drilling operations for oil on Lot 31 Con. Township of Humberstone on the farm of David Steele, father of C. E. Steele this was in 1864 or 65. Some of the men connected with the company were Mr. Hellems of St. Catharines who was President of the Company, John Mathews, John McCullough, Mathew Richardson, Chas. Carter, Lewis Carter, David Steele, John Schofield, Samuel [illegible] and I suppose several others. The stock sold at $25.00 per share and David Steele leased his farm for 25 years.

The rig used was something similar to the ones used today but smaller and lighter. This rig was sold to the company by Mr. Hellems and the drilling was done by day work. The rope cable used was purchased by John Mathews in Oswego and cost about $100.00 for approximately 1,000 feet. The actual drillers were Nelson O'Brien and his brother-in-law John Elliott of Port Robinson. The size of the hole was 5 inches in diameter. They would drill about 6 feet, pull out the tools, take off the bit and put on a reamer and run down the 6 feet again. The object was although they kept the tools turning constantly to make a more perfect hole.

Sulphur gas was struck at 400 feet. Evidently they struck gas in the Clinton formation and from information gathered I think they had at least an open flow of 500 M. cubic feet per day. Of course they were drilling for oil and the gas was more or less of a nuisance. They piped the gas back under the boiler and used it for fuel for a time but owing to the water collecting on top of the gas, it came in puffs and one day the well caught fire and exploded. After this they went back to their old fuel. The drilling after the gas was struck continued under difficulties. There was no casing or pipe of any kind in the well. The water, surface and salt, would collect on top of the gas which would make pressure; the water would be blown about 50 feet in the air and any person nearby would get a shower bath.

This continued until they were down 830 feet at which depth the well was abandoned. The tools were left in the well; this was in 1866. Of course the oil industry was in its infancy at that time.

The salt water was taken and boiled down to see if they could make a salt smell out of it. The red medina was used to make a weather proof paint and in fact the story was once circulated that they had discovered gold.

The Steele well kept blowing water and gas intermittently for years. About 1870 Jefferson Steele, who lived and still lives on the farm, by means of a small pipe would blow up a pig's bladder and carry it to his house and burn the gas for curiosity.

In 1872 Titusville, Pa., was piped for natural gas for domestic purposes. This was the first real effort to sell gas for all purposes, the gas being delivered through a 2-inch line from the Newton well about 5 miles north of Titusville.

In 1880 Jefferson Steele gained some information from a man by the name of Robinson who had been to the gas fields of Pennsylvania. They put a leather packer similar to what is known as a screw packer today down about 400 feet connecting it with a ¾ inch pipe, brought some of the gas through it and piped it to his house. Of course water and gas came out at the same time.

He had two wooden tanks made, one to fit inside the other, telescope fashion. These tanks were about 5 ft. by 7 ft. or about the size of an ordinary cistern. The gas and water would come into the bottom tank and the gas taken out of the top one. This was practically a gasometer and regulator combined. The gas from the well he did not use escaped between the two tanks into the air. After he reached the house with the gas through a 3-4 inch pipe they first burned it without air and of course they collected a great deal of carbon on the cooking utensils. Robinson and Mr. Steele had an air mixer made out of tin something similar to two dippers telescoped and which they could regulate the air. I would say that this was the first natural gas burned for domestic purposes in Canada.

During the time that well was being drilled or shortly after it was abandoned, an oily scum or what looked like oil was noticed on a pond on Lot 5, Con. [illegible] in the Township of Crowland, on the farm of Lemon Dell. The oil boom was drifting from U.S. and Edward Redpath, then a prominent merchant of Lundy's Lane, succeeded in forming a company which consisted of about twenty-five members of the immediate vicinity of the Dell farm and the

stock sold at $25 per share. A location was made close to this pond and drilling operations commenced in the summer of 1866. The rig used was similar to the one used in drilling the Smale well. A rope cable about 3 inches in diameter was used for drilling and they drilled a six inch hole. A Frenchman whose name could not be remembered from Pennsylvania, owned the rig and did the drilling. The contract price was to be $600.00 for the well. At about 550 feet, on March 13, 1867, they struck gas and immediately the well took fire and all equipment was burned leaving the tools and rope cable in the well. You must remember that there was no casing or pipe of any kind in the well and the bystanders could not understand the water and gas coming out together and the gas continually burning, wondering why the water did not extinguish it. From information gathered, this well must have had an open flow capacity of at least 500 M. cubic feet per day. Even today wells of that size when once caught fire generally burn all equipment and are not easily extinguished.

The well was immediately abandoned and like some of the enterprises of today a number of the shareholders had subscribed for stock, but had not paid for it, and never did. The bulk of the paying fell upon Mr. Redpath.

This well forced water and gas from it for years when a stranger whose name I could not get, put up a small pole derrick and salvaged the tools and rope, selling some of the rope cable to the citizens in the vicinity. I had the opportunity of seeing a piece of it and it consisted of 3 one-inch lines woven together, making a 3 inch cable. From information received I do not think there was any gas sold for domestic consumption from this well. The people on the farm and vicinity were frightened of it and decided to leave it alone. I am greatly indebted for most of the information obtained about this well to Alfred Pearson.

After the towns of Pennsylvania and Western New York had been piped for natural gas and had proven a success, the Port Colborne Natural Gas, Light and Fuel Co. was formed with C. McNeal, Sr., President, and D. Hughes, Secretary-Treasurer, and began operations in 1885. The corporation of Port Colborne contributed a bonus of $500 to the enterprise with the understanding that if the company was successful the amount was to be repaid to the

village in gas for lighting the streets. The well was located on village Lot No. 7, South Charlotte in the village, where the Guild Hall now stands.

The well was drilled by a Mr. Johnson of Petrolia. The rig used was known as a pole tool rig, white ash poles bolted together in about 30 foot lengths and the stem or drilling bar screwed on the end. These were screwed together and lowered into the well length by length and taken out the same way to change bits or run the bailer; as they went down the length of one pole another pole was added. These poles answered the same as our wire line or rope cable.

Salt water was struck at 455 feet and gas at 765 feet, but not in sufficient quantities to satisfy the company. The rig was then changed to a cable rig and the well drilled down to 1130 feet at which depth the tools got fast and are still there. The open flow capacity was about 10 M cu. ft. per day and at that time estimated at 200 ordinary lights. A one inch pipe was laid around the village and gas sold to consumers for lights only. This pipe was laid around the business portion of the town on West Street around to the Catholic Church and as far down King Street to DeW. Carter's, across the canal down East Street and around to McNeil's hotel, then up Welland Street to Mathew Richardson's. The rate charged was $1.50 per light per month or approximately 5 cents per light per day. If they were not burned the full month each night a rebate of 5 cents per light per night was made to the consumer and sometimes the bill would be $1.30 or $1.35 for the month.

The time intervening between the striking of the gas and the laying of the pipes, Mathew Richardson, one of the shareholders, had a large rubber bag which he would fill with gas from the well, carry it over to his residence which he had piped for lights and burn it in jets around the house. Of course, he made several trips per week.

A great deal of trouble with these early wells was caused by water, even if the casing was tight. Evidently they never figured that the salt water came in with or near the gas and needed immediate attention as soon as drilling operations stopped. At that time no precaution was taken to take care of the water and as a result the small capacity wells were soon drowned out.

After the finishing of the well as you may call it where the Guild Hall now stands, Mathew Richardson made a contract with Mr. Johnson to move his rig over the canal and drill on Lot No. 20, West Fares in the village of Port Colborne, near Mr. Richardson's residence. Richardson paid Johnson $800.00 and furnished power, casing, etc., and one man to help. This well was also drilled with the pole tool rig. Salt water was struck at 400 feet, cased at 450 feet with 5 inch casing; below the casing a 4 inch hole was drilled to the bottom, which finished at 750 feet. In those days most wells were shot, as it is termed, to splinter the rock where the gas is struck, to increase the flow, but unless this operation is carried out correctly, and the well thoroughly cleaned out afterwards, it was as a rule a detriment, rather than a benefit to the well. Eighty pounds of nitro glycerine were used in shooting this well, but the driller refused to run the tools in again to clean out the hole, claiming a cave-in might occur above the tools and he would lose them. In this shape the well was left. Although Mr. Richardson had a good sized iron gasometer made and spent a great deal of time in trying to collect the gas, the open flow capacity was very small and even today a little gas escapes from this well. The only gas sold, was to a few of his immediate neighbors, and that only for a short time. This was in 1889.

The following year Samuel Hopkins, Sr., drilled a well in the rear of the Hopkins Block, Port Colborne, but this, too, was of small capacity, and as there was no way of taking care of the water [illegible]

This short paper concludes the early history of the attempt of the pioneers of Welland County to establish the oil industry which after years of drilling in later years proved to be an impossibility, and although financially these early wells were not a success, yet the money was not spent in vain for it gave the incentive to the next generation to go on and develop the natural gas fields of Welland County.

THE FIRST SIGN OF GAS IN WELLAND COUNTY WAS AT BURNING SPRINGS—GOURLAY MENTIONS IT IN 1817

By George Wells

Many of the older residents of this district will remember the "Burning Springs" at Niagara Falls. They were located on the banks of the great cataract of the Niagara River between Chippawa and Niagara Falls. As a very young lad on my way to Drummondville with my parents to do marketing, I well remember the big sign on the side of the roadway "To the Burning Springs." As I remember the legend as to its discovery it was while workmen excavating at that point for a spring well when one of the workmen in lighting his pipe set fire to escaping natural gas that was emanating from a crevice in the rocks. This discovery of a burning spring was another wonder of the world for the sightseers in those days who came to Niagara Falls. It then dawned on the mind of some of the promoters of the many points of interest that this would be a money-maker and accordingly it was extensively advertised as the "Wonderful Burning Springs at Niagara Falls, Canada." It was visited annually by thousands of tourists every summer from all parts of the world. That is the first that I remember of the commercializing of natural gas in Niagara District. Whether the Burning Springs are in existence today or not I cannot say but the sign was there a few years ago. I remember a story that was told of a son of the Emerald Isle who was sight-seeing at the Falls. He was asked by his guide what he thought of the burning springs when he replied "That they were robbing God of what He intended to burn the world up with."

To complete the chain of this gas story it will be necessary to leave the Burning Springs and take you to the great Petroleum Oil Fields of Pennsylvania—which would be about the year 1864

or 1865—where flowing wells of petroleum oil were being produced by the hundreds—and where thousands of people were flocking to make their fortunes in oil and where cities were building up in a night. A number of people from this district joined the great army of oil seekers, but not many succeeded in making fortunes, but a few came back who thought themselves rich in geological knowledge of the earth's substances, and instilled it into the minds of a few of the people in the district that the prospects for petroleum oil was as good as in Pennsylvania, and then commenced the formation of companies for the drilling of oil wells.

We quote the following paragraph from Mr. Robert Gourley's history of the Township of Stamford, in the County of Welland, in the year 1817:

"Of the minerals there are none, except bog iron and ore; limestone there is abundance, it being the general strata of the Township, all the bank of the Niagara River being of this, as also the rock over which the Niagara Falls pour. No plaster of paris has yet been found of a good quality; some marl, an oily rock, some salt licks on the banks of the Chippewa, no salt springs; several inflammable gas springs, which ooze out of the bank of the Niagara River, from the mouth of the Chippewa River, and extend about one and one-half miles down. The gas from some of these, when confined in a tube, will burn constantly."

The first company for the drilling of wells for petroleum oil was organized in the Township of Pelham on Tuesday, Sept. 12, 1865, and was called the "Pelham Oil Well Company." The first meeting of the shareholders was held in the [illegible] School house, with Dr. Fraser, chairman, and John B. Crow, secretary.

The capital stock of the company was $2,000 fully subscribed. The following gentlemen were elected as directors: Saml. Beckett, Rob. D. Cardenas, Jos. Garner, Dan. C. Roland and Nehemiah H. Ward. I have no information as to what property the well was located, but the company started drilling operations that fall, for in the early spring of 1866 they met with a misfortune by losing the drilling tools in quicksand, and that apparently wound up the company's operations, although they received their charter in May, 1866, but we have never discovered where they have done

any further work, or that they ever found any indications of oil or gas. They sold the drilling machinery to another oil company.

PORT COLBORNE OIL COMPANY

On Thursday, February 24, 1866, a meeting of the citizens of Port Colborne was held at Hardison's hotel for the purpose of organizing an oil company. The capital stock was fixed at $6,000. Lewis G. Carter was appointed to the chair. The following were appointed trustees: John Gordon, Port Colborne; Chas. Hellems, St. Catharines; John Matthews, and Thomas Carter, Port Colborne. Drilling operations were commenced on a well on Tuesday, May 6th, 1866, on the property of David Steele, a short way west of Port Colborne. The well was drilled to a depth of about 500 feet when quite a large vein of natural gas was struck, when the tools became fast and operations for drilling for petroleum ceased. Natural gas flowed from this well for a number of years before it dawned upon the minds of men that it could be used for commercial purposes. Nothing further was ever done in this section as to drilling for petroleum oil.

CROWLAND OIL WELL

On August 16, 1866, a company was formed by Drummondville capitalists for the drilling of a well in Crowland Township for petroleum oil. The well was located on the farm of Lemon Bell, near the historic village of Cooks Mills, as the geologists who had just returned from the oil fields of Pennsylvania claimed the soil in this locality resembled very closely the soils of Pennsylvania, where all the rich oil fields were being produced. High anticipations by the farmers of the community that in a few years Cooks Mills would be a bustling city like the oil towns of Pennsylvania with its many oil refineries.

The machinery for the drilling of this well was procured from the promoters of the Pelham Oil Well. In March, 1867, when at a depth of about 500 feet operations at the well were temporarily suspended on account of the large quantity of natural gas emitting from the well. The force with which the gas rushed from the well was such that at times it threw up jets of water from 20 to 25 feet, completely drenching everything in the derrick room.

The discharge of gas gradually became less, the flow of water decreased and the employees resumed work, but for only a few days, when one evening between the hours of 10 and 11 o'clock, when the discharge of gas increased to such a degree as to ignite with the lights of the workmen almost instantly enveloping the derrick in flames and totally destroying it. The shareholders met on the 24th of March that year to make arrangements for the rebuilding of the derrick, but it was finally abandoned.

A number of years after the well was abandoned the gas was piped into a near-by house and used in the cook stove, for cooking purposes. (If memory serves me right the name of the family was Quinlan or Quinan.) The house was located a short distance from the well.

We think it strange these days in the progress of science that the mind of man should have lain dormant for those many years without seeing the great commercial value of natural gas—for it was many years after this before natural gas became a great commercial commodity in this district.

Since this article was written there has come to hand Vol. III of the Simcoe Papers, edited by General Cruikshank. One letter quoted is from a gentleman to his friend, descriptive of the different settlements in the Province of Upper Canada (New York, November 20, 1794) and there is a paragraph on the discovery of natural gas in Welland County. Since this is the earliest reference to natural gas we have seen the paragraph is here reproduced for its historic interest.

Amongst many other natural curiosities, a spring about two miles above these falls attracts the attention of the curious,—emitting a gas so inflammable as, which when confined in a pipe and a flame applied to it, will boil the water of a tea-kettle in [illegible] minutes. Whether this may hereafter be applied by mechanics to useful purposes, time will determine. It was lately discovered in clearing away and burning the brush under the bank of the river near a mill, and was observed after the brush was consumed to burn for days together to the great astonishment of the whole town.

ORIGINAL AND HISTORY OF THE DEVELOPMENT OF NATURAL GAS

By Chas. E. Steele

To tell the whole story of the origin and development of natural gas would require volumes, and many phases of business activities would be vividly depicted, for there are few enterprises more alluring or more difficult than the natural gas business. The industry comprises three separate and distinct branches, each containing many sub-branches interesting and important, and each sub-branch containing sufficient material for a reasonably long article. These branches are Production, Transmission and Distribution. There are certain economic, scientific and business laws which in a marked degree run through and bind together all these branches, but for the purpose of this paper I will confine myself more particularly to distribution. The story of the distribution lines in both urban and rural communities, and a study of the system necessary for the control and regulation of the pressures would be interesting, but we will consider distribution only under three heads, namely: Waste, Conservation and Price.

WASTE

Welland County is the oldest producing gas field in Ontario, the first commercial well being drilled in the Township of Bertie in 1889 by the Provincial Gas Co. The early history of the natural gas industry of this field is similar to that of practically all fields. The mistaken idea prevailed that because the early wells were large producers the supply was practically limitless. This old but vital error was followed by a large measure of waste. Wells were sometimes allowed to remain open for a considerable time after being drilled in, and leaks in gas lines were not promptly re-

pected. The more serious loss, however, to the field, has resulted from the ridiculously low price at which gas was sold in the early days. In 1892 the Mutual Natural Gas Co. supplied the Erie Glass Co., at Port Colborne with gas at one thousand dollars per year, and the only stipulation contained in the agreement was that the use should not exceed two hundred thousand cubic feet per day, which figuring three hundred days use would be at the rate of one and two-thirds cents per thousand cubic feet. It requires no argument to impress a Welland audience with the inevitable result of selling natural gas at such a price. This price of course, was unusually low, but immense quantities have been sold for industrial and domestic use at prices ranging from five to twenty-five cents. For a number of years in Welland County practically all gas sold for domestic use was sold at a flat rate, that is, so much per stove per month, and available records show that gas was supplied for a cooking stove and a heater for use during the entire year for $27.00, and that without any limit upon the amount consumed. It naturally follows that a commodity sold at a fraction of its real value will be wasted, and there is no more outstanding example so definitely shown as in the operation of the distribution and sale of this valuable commodity. Natural gas in Welland County and practically throughout the gas producing area of Ontario contains about 1000 B.t.u. per cubic foot, while artificial gas usually contains about 400 B.t.u. per cubic foot, but rarely exceeding 500, which makes natural gas about twice as rich in heating properties as the artificial gas. In the early days exceedingly crude and wasteful appliances were used in the stoves, in the furnaces, for lights and indeed everywhere. This was to be expected, because the gas cost practically nothing. Producer and consumer were alike ignorant of the value of this wonderful fuel and ignorant also of the fact that the supply would inevitably diminish and ultimately become exhausted. In a business place in Welland County (in the early days) the proprietor was burning gas lights throughout the place during the day and when asked by a customer why he did not turn them out, replied that the gas light was cheaper than the sunshine. Many interesting and almost unbelievable stories could be told of the use of gas in the early days. When meters were not used and gas sold at a flat rate,

people often kept their stoves burning continuously and explained by saying that they wanted to get even with the gas company. The waste in the early history of the natural gas business was inevitable from the circumstances which attended the development of the field. There are close analogies in the history of other industries. The pioneer settlers of this country cleared the forests from the land and burned the brush and logs to get them out of the way. If lumber had been worth its present price this would have been an appalling waste, but the imperative need was for land and there was a seemingly inexhaustible supply of timber, so their action was inevitable and logical.

The natural gas industry has progressed from a condition of abundance to one of scarcity in a fraction of time required by the lumber industry, but the steps have been exactly the same. Unfortunately there is one striking difference between the lumber and natural gas industries. Scientific forestry effects a perpetual production of timber. The best that can be done with natural gas is to so conserve the remaining supply that as little as possible of it will be lost, and to direct its use so that it may be made of the greatest possible service to the communities which enjoy its benefits. Every one of the processes through which natural gas passes before it reaches the consumer is accompanied by waste, as the operation of a machine is accompanied by friction. By proper design and construction friction in machinery can be reduced to any desired minimum. In the same way, waste of natural gas can be cut down. If a machine must be marketed at a low price it is impracticable to make it as easy running as a similar mechanism selling at a higher price. For the same reason, the waste in handling natural gas has always been greater than that of manufactured gas, which commonly sells for several times as much.

The gas consumers in this section are gradually but surely appreciating the necessity of co-operating with the gas companies in improving facilities for burning gas, so as to bring about the conservation. The abandoning of flat rates charged in the early days and substituting therefor instruments for measuring the gas was absolutely necessary, but the consumer, unconscious of the benefits which would accrue to consumer and producer alike, opposed the placing of gas

meters. Those little instruments were the monitors which emphasized the truth of waste and induced the consumer gradually to abandon the appliances originally used in the consumption of gas. The old pipe and log burners, full of big holes and bigger cracks, first gave place to the three and four way burner in ordinary cooking stoves, and later these burners and stoves were put aside for gas ranges. The incandescent lights with proper combustion appliances took the place of the old jumbo burners and flaring tips. Natural gas was burned in many furnaces by simply inserting ordinary gas pipe, but today where gas is utilized in furnaces at all it is through the use of scientifically arranged burners which produce the most satisfactory results.

From an experience of twenty years in the natural gas business I am confident that I do not over-estimate when I say that throughout Welland County one thousand cubic feet of gas is today giving as great, if not a greater, service to the consumer than ten thousand cubic feet did in the early days. If economic appliances had not been brought into use there would be no natural gas in Welland County, and indeed it would have been exhausted years ago.

I said I would confine this paper more particularly to distribution, but as I have referred to the more economic appliances used by the consumers, I wish also, in fairness to the producers, to say that the gas companies have, for the most part, also applied themselves to the work of conservation. Having had special opportunity of observing the handling of natural gas in the county, I want to state that we owe considerable to the wise and economic methods persistently applied by the Provincial Gas Company, and had the parent company in this old territory been one less careful and thorough this field would have been extinct years ago.

Another marked step in the economy of distributing natural gas is in the reduced pressures made possible, first, by the improved regulators and more of them, and secondly by ways of scientifically constructed facilities for burning. In the early days consumers thought their supply very limited unless they had at their disposal a pressure of something like one pound to the square inch, and unfortunately in a great measure this deplorable condition still exists in the rural districts, more especially in the western part of the province. While motoring through the gas areas of Kent and Nor-

folk a few weeks ago I saw dozens of individual gas regulators along the country highway loaded with bricks and other objects placed there by the consumers to give them a very high pressure service. These methods are slowly but gradually being eliminated, and instead of it being necessary for the companies alone to correct this unwise and wasteful practice, the consumers should really be the first to stop the practice, and they no doubt would if they realized the immediate danger to their homes and their property. There is an old adage which says, "We never miss the water till the well runs dry," and methinks that is what the sage really meant: "You never miss the gas till the well runs dry."

The Provincial Government has framed considerable legislation very largely with the object in view of conserving the remaining supply of natural gas. We have said that Welland County is the oldest producing county in the province, dating back to 1889. There was, however, some gas produced in the County of Essex prior to this time, but the field soon became flooded with water and was abandoned. We may therefore consider that the natural gas industry began in this county and in the year 1889. From that time until 1919 there was practically no government control. The natural gas industry was conducted as any other business, more or less, as far as the nature of the industry would permit. Companies arranged with land owners for permission to drill wells on terms agreeable to both parties. The companies were free to sell gas where they desired and at such prices as they could secure. The companies were in fact absolutely free to manage their own business. Gas was being found in large quantities,—in fact wells that would be considered very fine wells today were not then kept, and in order to secure a market contracts were made with industries for large quantities of gas. In the year 1919 a distinct shortage of gas for domestic use was experienced in the Counties of Essex and Kent. The Government was appealed to, and asked to take some steps to compel the gas companies to discontinue the sale of gas for commercial purposes, so as to insure a sufficient supply for domestic use. In compliance with this request the Government issued peremptory orders compelling the gas companies to discontinue to a very large degree the sale of gas to industrial plants. This order had the effect, of course, of breaking contracts

between the gas companies and industrial concerns which they had been supplying. Later in the session of 1919 the Legislature passed an Act which was known as the Natural Gas Act of 1919 and which contained many regulations and restrictions intended to control and direct the gas companies in their operations. Ostensibly the thought in the minds of the legislators was the conservation of the remaining supply, but it is significant to note that the first Act, as already stated was known as "The Natural Gas Act," whereas it will be found that in 1921 the Legislature passed another Act known as the "Natural Gas Conservation Act," which suggests that even our legislators were progressing in thought and research.

The action of the Government in 1919 had the effect of placing the natural gas business in the list of public utilities, although the companies have always maintained that the natural gas business should not be treated in the same manner as other public utilities and I believe a study of the situation will convince any person that their contention is sound. In the first place, the search for natural gas is purely and clearly a mining enterprise, just as hazardous as any other mining enterprise, and no doubt some of you could tell how great that is. Not only is the search for natural gas a mining hazard, but after gas has been discovered, it is so elusive that what we appear to have today we may be unable to find tomorrow, whereas in the mining of solid minerals once a paying vein is struck it remains intact until removed.

There is no doubt, therefore, that the natural gas business, in a very vital sense, differs from every other public utility. Money invested in the search for a supply is very often lost entirely and the same holds good throughout the operations, for, particularly in these later years, a majority of the wells drilled are either useless or so small as to make it difficult to secure a return sufficient to justify retaining them. Then again the gas company, unlike other public utilities, are dependent upon one source, which begins to diminish as soon as found, and when the gas supply is gone there is no way of renewing it, and the companies must either go out of business or adopt means for producing artificial gas. Under the Act of 1922 provision was made for the fixing of gas rates made necessary for the reasons before cited. The Government realizing

that having interfered with contracts made between the companies and a large number of industries and thereby cutting off a large source of revenue to the companies, some provision would have to be made to allow the companies to secure better prices from their remaining consumers. This was a reasonable view to take. In fact the Government could take no other attitude, particularly as the action was taken in the behalf of the domestic consumers and was intended to not only give them a better service but that for a longer time.

Conservation involves the partial sacrifice of the present to the future. No one can be induced to do this unless the future reward is greater than the present sacrifice. This puts the matter on a business basis, the only basis on which it can be permanently successful.

When natural gas was selling at from five to twenty cents per thousand, or where gas was delivered for cooking and heating an ordinary residence for $27.00 per year, it is obvious that it would not pay the consumer to invest much money or do much worrying about the amount of gas being consumed, but as prices have increased conservation has fairly well kept pace. Let us now consider what would be a fair price for natural gas. Probably 90 per cent. of the people of the Province of Ontario are dependent upon coal for heating their homes, and when they buy they must go in the open market and pay the price asked. If coal oil or crude oil is required, they also must be bought in the same manner. These fuels, for which natural gas is a substitute, are not controlled by prices fixed by the province. This was true also of natural gas, as stated previously, up to the year 1919. As the commodity is now under the control of the Legislature and provision has been made and for the past four years has been applied fixing the rates, we must abide by these regulations and face the situation as we find it. Under these conditions, and treating the industry as a public utility, I would say first of all that the consumer should pay a price sufficient to give the company serving them a reasonable and equitable return, and no more.

Before I conclude this paper I would like to give a few general facts showing the effect of the industry upon the public as a whole which I believe will stand a rigid comparison with any other industry in the province.

The amount of capital invested in the natural gas business in the Province of Ontario is approximately forty millions of dollars.

A conservative estimate for the year 1913, according to the statement of a disinterested engineer, brings out the following facts. For that year substitute fuels would have cost three and one-half times as much as natural gas. The loss in money exported to pay for coal and oil would be $4,099,266. The loss in rentals (which were paid by the companies) $122,459. Loss in taxes and wages $883,075; or a total of $5,104,800.

This, according to the engineer referred to, would have been the loss sustained by the public if natural gas were not used and had the companies not existed.

A great deal has been said and reference often made to the fact that a number of gas companies in the early days made for themselves large dividends. That is admitted, but a conservative estimate will prove that for every dollar that the gas companies received in profits four dollars was actually saved by the gas consuming public. There are nearly half a million people in the Province of Ontario enjoying the benefits which accrue through the use of natural gas, and it is doubtful if any other industry in all of Canada so directly affects as many homes as the natural gas industry.

UNVEILING OF MEMORIAL CAIRN

A large number of people from every municipality in the Counties of Lincoln and Welland, and with many from distant places, gathered on the grey, cold afternoon of Saturday, November 29th, 1924, at Allanburg, to attend the unveiling of the cairn and tablet erected to commemorate the centenary of the turning of the first sod of the Welland Canal. That sod was turned on November 30th, 1824, by George Keefer of Thorold, the first President of the Welland Canal.

The cairn is of field stone. It stands at the west end of the Allanburg bridge and is very close to, if not exactly on, the spot where the company gathered a century ago to witness the beginning of what was destined to be a great undertaking, great in its relation to the development of this community, and great as a factor in the progress of Canada.

THE UNVEILING

It was fitting that the unveiling ceremonial should be so graciously carried out by Miss Catharine Welland Merritt, granddaughter of the Hon. William Hamilton Merritt, founder of the Welland Canal, builder too of the first bridge to span the Niagara River and of the Welland Railway.

Miss Merritt said:—

> "To commemorate the courage, vision, patience and energy of the men of this district who met at this spot to begin a public utility which has brought prosperity and success to our land, also to congratulate their successors on their achievement today, I have the honour to unveil this cairn and tablet. This I do with the greatest pleasure.

INSCRIPTION

The 1st Welland Canal

The Old Welland Canal

Near this spot on 30th November 1824 the first sod of the old Welland Canal was cut by George Keefer President of the Welland Canal Company as the promoter of William Hamilton Merritt whose persistence of the enterprise and above 1200 other persons

The great work connecting Lake Erie and Ontario for ship navigation was planned and carried out by a private company

DISTINGUISHED PEOPLE

His Lordship Bishop Clark of Huron erected the dedicatory prayer as follows Present viz. O Lord in all our doings with Thy most gracious favor and further us with Thy continual help that in all our works begun continued ended Thee we may glorify Thy Holy Name and finally by Thy mercy obtain everlasting life through Jesus Christ our Lord

In the Name of the Father Son and Holy Ghost we dedicate this memorial to the Glory of God and in memory of Hon. William Hamilton Merritt George Keefer and his associates through whose energy and foresight we were to celebrate the setting of the first sod of the Welland Canal one hundred years ago

The Grace of our Lord Jesus Christ and the Love of God and the Fellowship of the Holy Ghost be with you all Amen

WARREN STORY

Warden J C Stout presided over the historic event On the platform with him were Miss Catharine Welland Merritt Hon P H Keefer Miss Jane Carrochan, Niagara-on-the-Lake Bishop and Mrs Clark Ven Archdeacon Perry O E Fleming President of Canadian Deep Waterways Association W M Germain K C M P Ed Gurney, M P P and Dr J H Coyne of St Thomas, who represented the Elgin Historical and Monumental Board and who was the chief speaker

A LEGAL SERVANT

Enclosed from was added to the scene by the presence of the 98th Lincoln and Welland Regimental Band under Bandmaster J

Holden, the Welland Sea Cadets, who formed a guard of honor under Instructor Horace Cox, the Daughters of the Empire from Welland and St. Catharines with their standards, and War Veterans from St. Catharines and Welland.

The programme opened with the National Anthem played by the band and sung by the assembly. Then following the unveiling, the band playing "Rule Britannia," and the historic event closing with the "Maple Leaf."

An impressive feature of the afternoon was the placing of wreaths at the base of the cairn. Floral tributes were placed by the I.O.D.E. of Welland, St. Catharines, Beamsville and Thorold and the G.W.V.A. of St. Catharines.

RECEPTION

Following the unveiling a reception was given at "Oak Hill," the historic Merritt home, by Miss Catharine Welland Merritt. Additional interest was lent to this very pleasing event by an exhibit of relics of a century ago, chiefly pertaining to the canal. These included the first plan of the canal. Sir Isaac Brock's chest, leather bound and brass nailed, was also shown.

ST. ANDREW'S DINNER

Saturday evening St. Catharines Chamber of Commerce gave a St. Andrew's night dinner at the Welland Inn, where several hundred prominent men of the Niagara district assembled. A silent toast was drunk to the pioneer canal builders. Major H. B. Burgoyne, the President of the Chamber of Commerce, presided.

Addresses were given by Frank H. Keefer, an old Thorold boy, grandson of George Keefer, the first president of the canal company, Commissioner for Northern Ontario; Lieut.-Col. W. N. Ponton of Belleville; Manager Hugh M. Bell of the Chamber of Commerce; Wm. Dakers of St. Catharines; Mayor Jacob Smith, St. Catharines, and others.

DEDICATORY ADDRESS BY J. H. COYNE, M.A., LL.D., F.R.S.C.

OF ST. THOMAS, OF THE HISTORIC SITES AND MONUMENTS BOARD OF CANADA

THE cutting of the first sod for the Welland Canal was an event of no ordinary significance. The Department of the Interior, acting upon the advice of The Historic Sites and Monuments

Board of Canada has recognized its national importance by the erection of this memorial cairn with tablet and inscription, near the spot, where on the thirtieth of November 1824, George Keefer, President of The Welland Canal Company in presence of about two hundred persons cut the first sod of the original Welland Canal. Of that ceremony tomorrow will be the hundredth anniversary.

> Little of all we value here
> Wakes on the morn of its hundredth year

and those who took part, whether as speakers or hearers, in that memorable gathering, upon or near the ground on which we are now standing, have long since passed away. But the spirit of the pioneers of Lincoln and Welland has not passed away and their descendants are here today to join in paying honour to the leaders in that great undertaking. From other parts of the province also representative men and women are present to unite in this public tribute of remembrance and praise.

On the earlier occasion the outstanding figure and principal speaker was William Hamilton Merritt, originator and chief promoter of the enterprise. We are fortunate in having with us at this gathering, grandsons of both Mr. Keefer and Mr. Merritt and also the latter's grand-daughter, Miss Catharine Welland Merritt. It was eminently fitting that Miss Merritt should have been chosen for the high honour of unveiling the memorial, and on behalf of the Department and the Board I have to thank her for having so graciously acceded to the request that she should do so.

The story of the Welland Canal and Merritt's connection with its inception and promotion is full of interest and instruction. It is to be found in many publications of which one of the latest is General Cruikshank's admirable monograph. It has been concisely told in excellent special articles in the local and Toronto press. Fortunately this renders it unnecessary for me to do more, in the short time at my disposal, than to present a few salient features.

The War of 1812 emphasized the imperative necessity, from the military point of view, of a canal system for the St. Lawrence and the lakes. To young Merritt the idea seems to have come in 1812 while engaged, as an officer of dragoons, in patrolling the bank of the Niagara. He was then a youth of nineteen. In 1816, he

came a practical question through the need of a satisfactory water supply for his mills at St. Catharines. But his views extended far beyond mere personal advantage. Across the Niagara frontier the projected Erie Canal was beginning to become a reality. In seeking public support its promoters claimed that it would attract to the city of New York the entire traffic of the north and northwest, including that of the Canadians, north of the lakes. To guard against such a contingency immigration from the States was discouraged, and every effort was made to attract immigrants from the British Isles to the new settlements in Upper Canada. But in any case, what would be the result, if the only outlet for their products to the European market was through the United States by the Erie Canal and the port of New York? With statesmanlike vision Merritt saw the political peril confronting the ancient British communities, and from that time forward he devoted himself to the truly patriotic policy of an all Canadian route to the sea for the products of Canada. As a Loyalist to Loyalists, he advocated earnestly and persistently the imperial as well as the commercial advantages of the construction of a canal between Lakes Erie and Ontario. He proceeded to enlist the support of leading public men, business interests and representative bodies in the scheme. It was denounced as wild and visionary. It was opposed by selfish personal and jealous local interests. Even more difficult to overcome was in the early stages the indifference, the inertia, of the public. It was a long and uphill fight, but step by step he won out at last. Undaunted by rebuffs, delays and failures, which might easily have disheartened a weaker man, he proved himself

> One who never turned his back, but marched breast forward,
> Never doubted clouds would break,
> Knew we fall to rise, are baffled to fight better,
> Sleep to wake.

Final success gave him the honored place he rightfully holds among the statesmen of British America. The canal now under construction, a fourth in order from its pioneer original, for which the first sod was cut one hundred years ago. Its ultimate expansion to meet the demands of the future will doubtless surpass our dreams of today. Advances will be made in naval architecture

and the machinery of propulsion, land, air and water will compete for the transportation of the world's commerce. But in the centuries to come, however distant they may be, it is within the bounds of human probability that the Welland Canal will continue to bear upon its bosom great ships, greater than those of today, laden with the commerce from all the ports and oceans of the world. And always with the Canal will continue to be associated the name of William Hamilton Merritt. It is pleasing to note that the filial piety of a grandson, the late Colonel W. H. Merritt, has provided a fund for a more imposing monument than has been erected elsewhere at so early date to the memory of the founder.

Although it was not until 1824 that the first sod of the canal was cut, the initial step towards its construction had been taken six years before, in a memorable experimental survey undertaken by Mr. Merritt, accompanied by Mr. George Keefer, Mr. John DeCew and other friends. A line for the contemplated excavation was run with the aid of a primitive water-level borrowed from a neighboring mill. It is not surprising to learn that a height estimated by the amateur surveyors as thirty feet turned out to be actually sixty feet by later expert measurement. The original plan of the first survey is still in existence in the family archives. It is an historical document of national importance.

Time would fail me here to make more than the briefest mention of the long continued efforts to finance the project. He enlisted the sympathy and support of members of the legislature such as Robert Nichol and Mahlon Burwell, John Beverley Robinson and his brother Peter Robinson. The Hon. John Strachan was zealous in the movement. Merritt paid repeated visits to the centres of capital, Montreal and Quebec, New York and London. The Governor-General, Lord Dalhousie, the Lieutenant-Governor, Sir Peregrine Maitland, in Canada, DeWitt Clinton, Governor of New York, entered heartily into the scheme. He won the support of the Quebec Chamber of Commerce, the legislatures of Upper and Lower Canada, the London Times and the British Parliament. John Jacob Astor in New York and Rothschild in London enthusiastically approved the venture, but [illegible] from materializing in dollars and pounds. Other New York capitalists would have gladly subscribed the entire amount necessary

but Merritt was determined to keep the control in British and Canadian hands. Little financial help could be expected from Upper Canada. The province was poor; settlers were few and far between. An official map of 1813 shows the towns of Niagara and York, but not a single village or hamlet between them and Burlington Bay. Such trade as there was, was carried on largely by barter, money being conspicuous by its scarcity. Of the original capital of 40,000 pounds, only one-fourth was taken up in Canada. When the first sod was cut, Keefer and Merritt had paid up on their shares $25, and DeCew and Thomas Butler $12.50 each. Such were the small beginnings of the great undertaking, which in its later development has resulted in the magnificent Welland Canal system now in operation, representing a total outlay to date of some $80,000,000, and intended to provide in the immediate future for the passage of great ocean steamers drawing twenty-five and ultimately, if needed, thirty feet of water.

The Erie Canal was completed in 1825. Merritt lost no time in proceeding with his work. In November, 1829, by utilizing the Welland and Niagara Rivers, vessels drawing seven and a half feet were able to pass from lake to lake, the canal being then completed from Port Dalhousie to the Welland River. Gaily bedecked with flags, they were greeted with enthusiastic welcomes by the admiring inhabitants lining the banks, whose wildest dreams had come true.

Meanwhile other canal projects, embracing the St. Lawrence, the Ottawa and the Rideau, were being actively prosecuted, and thus was inaugurated what may well be called the greatest canal system in the world. Altogether, according to a recent statement, Canada has expended on her canals alone more than two hundred millions of dollars, and now boasts of 465 miles of completed canals, with 159 locks. This mighty achievement, representing a century of progress, owes its inception to William Hamilton Merritt and his associates.

The fact should not be overlooked that the original canal was financed and built by a private company. It was only in 1842 that it was taken over by the government, and in 1852 that the repayment to the shareholders of the amount of their subscriptions with six per cent. interest was completed. By that time $800,000 had been expended upon the undertaking.

Merritt was a practical idealism and proved business ability combined to give him the leadership as member of the legislature and in public and private enterprises in practically all matters relating to transportation whether by land or water. To borrow the words of the late Colonel W. H. Merritt, referring to his ancestor:

He projected and carried to successful completion the first railway Suspension Bridge in the world spanning the gorge of the Niagara, 1846-55, and the Welland Railway, 1855-58. He was the proposer and first chairman of the St. Lawrence Canals Commission, 1832, advocated the Sault Ste. Marie Canal, was principal promoter of the first railway charter in Canada, the Niagara and Detroit Rivers Railway Company, 1835-46, assisted the Great Western Railroad, 1846, advocated daily fast Atlantic Steamship service and gave impetus to many important improvements as President of the Council, 1848, and Commissioner of Public Works, 1850, in the Government of Canada.

The title of Father of Canadian Transportation may be fairly claimed for him. Several times he was elected to the Legislature. For the last two years of his life he was a member of the Legislative Council. He had rendered distinguished service as an officer of Dragoons in the War of 1812. He was present at the Battles of Queenston Heights, Niagara, Stoney Creek and Lundy's Lane, and missed by a day being at the taking of Detroit, being delayed by military duties. Such a record of public service entitles him to a rank second to none among the makers of Canada.

The first settlers of the region now traversed by the Canal were men belonging to the famous Butler's Rangers, who were disbanded in 1784. They were largely pre-Loyalists, having their winter quarters at Niagara during the Revolutionary War and from that centre carrying on their military operations. Their story has been effectively told by General Cruikshank in a pamphlet published many years ago through the liberality of the Welland County Council. Accusations brought against the Rangers by partisan historians have been shown by the General to have little or no substantial foundation. They and the later Loyalists who, after the revolution, abandoned home and property, the friends and associations of a lifetime, to hew out new homes in the northern wilderness, became the founders of British North America. They

brought with them their British laws and institutions, a profound sense of religion, a loyalty to the unity of the race and empire, and intensified by their sufferings and sacrifices an ingrained abhorrence of treason. As Britons they combined the love of law and order with the love of liberty, and that love they transmitted to the generations that followed.

The Revolutionary War had, as a consequence of the unsuccessful attempt to detach the French Canadian habitants from their allegiance to the British Crown, resulted in the elimination of many politically disaffected persons from the population of the lower province. The War of 1812 had had a like effect in the upper province as well. Successive invasions and plundering expeditions had united the inhabitants in a common feeling of animosity against the United States, and of intensified loyalty to the king and mother country. It was only after many years of peaceful relations that a real friendship was re-established between Canada and the great republic. The idea of a national Canadian sentiment hardly existed. But the war in bringing together in defence of their common country settlers from the scattered and widely isolated communities had created or increased a feeling of common interest in the land that had required and might again require their common effort in a common defence. And so the War of 1812 may be said to have been the first step in the evolution of a Canadian as distinguished from an imperial patriotism. The feeling was not likely to be lessened by the avowed desire on the part of the advocates of the Erie Canal, to bring Canada under the control of the States and as a consequence into the Union. Thus the Welland Canal project, in addition to the natural hope and expectation of increased land values and other business advantages, appealed to the loyalty and patriotism of Canadians. The general interest was widened and deepened by the advocacy and practically simultaneous construction of the St. Lawrence, Ottawa and Rideau Canal Systems, including the Lachine Canal. Closer business and political relations attended and followed their construction and enlargement, and there gradually emerged in all the scattered provinces a feeling of common nationality, which was at last crystallized in the union of all British North America, except Newfoundland, in the Confederation we have today. In the early de-

velopment of the national ideal of a united Canada, of loyal allegiance to the crown, and the wider ideal of a united empire rallying around the central throne, the influence of the Welland Canal may be regarded as one of the most important factors.

Now that Canada has taken a recognized place, an equal among equals, in the British Commonwealth of Nations, known as the British Empire, realizing the dream of 'Canada First' and other visionaries of half a century ago, it is well to remember the contribution of Butler's Rangers and the United Empire Loyalists to the wonderful political aggregation which today ranges itself under the sovereign of Great Britain and the imperial flag. For they were the first to proclaim the principle of the unity of the British race and the British dominions under the sovereign and banner of England throughout the Seven Seas. For a century and a half, whether the sky was bright and clear or war clouds obscured the sun for a season, they and their descendants have maintained the principle, and, when required, have sealed it with their blood. In its defence, as well as in the defence of their homes, they fought against mighty odds in the War of 1812. The history of nations shows that as the twig is bent the tree's inclined. Strengthened by the large immigration from the British Isles, bringing the same ideals, the same respect for religion and for law and order with British liberty, the influence of the Loyalists has been felt for good, through the course of our national history. If Lynch Law has never been known in our Dominion, if train robbers have been so rare as to be almost unknown, if crime is repressed and punished to a degree unknown elsewhere on this continent, the credit is due in large measure to the tradition of respect for law and order handed down to successive generations of Canadians from the heroic men and women who sacrificed all rather than their allegiance to a high and noble idea. It was for the unity of the Empire, as well as the preservation of these provinces, and later of the Dominion of Canada, that Canadians put down with the strong hand the rebellions of 1837, of 1870, of 1885, and repelled the Fenian invasions of 1866 and 1870. To maintain the principle of a united empire Canadian soldiers sealed their loyalty with their blood in the Crimea and on the African veldt. In adherence to the same principle Canada effected a reduction in imperial postage rates and adopted the sys-

tion of imperial preference in import duties. Foremost of the Dominions in the councils of the empire, she has ever been first in its defence. The great imperial poet recognized that primacy nearly a generation ago in prophetic words:

"They who are wise may follow
Ere the war-trumpet blows,
But I—I am first in the battle,"
Said Our Lady of the Snows.

And so, when the war-trumpet blew in 1914, Canada was first of the overseas dominions to range herself beside the Motherland. The victorious issue of the World War toppled many thrones, but the stability of our empire remained unshaken. Its bounds and its responsibilities are enlarged, its liberties extended. Canada finds herself in the first flush of world-recognized nationhood, and at the same time in still a closer relationship with her sisters in the British Commonwealth, and with allegiance to the person and throne of the king and the flag of the empire unimpaired. Toward this consummation, the United Empire Loyalists, the pioneers of Lincoln and Welland, with William Hamilton Merritt, their most famous citizen, and the wonderful canal system he inaugurated, contributed in no slight degree. We are here to pay them their due of honor and remembrance.

Could the founders of this settlement be with us today to counsel and advise, what would be their lesson and message to their descendants, and those who are to follow? Would it not be to the effect expressed by the poet in lines well known to many among you:

Hold ye the Faith—the Faith our fathers sealed us;
  Toying not with visions—overwise and overstale.
    Except ye pay the Lord
    Single heart and single sword,
  Of your children in their bondage shall He ask them
    treble-tale!
Keep ye the Law—be swift in all obedience—
  Clear the land of evil, drive the road and bridge
      the ford.
    Make ye sure to each his own
    That he reap where he hath sown;
By the peace among our peoples let men know we serve
      the Lord!

THE EARLY HISTORY OF ST. JOHNS

By J. F. Gross

A number of years ago, while driving in the St. Johns Valley with a friend from the State of Louisiana, as we crossed the spring-creek he told me to stop. He got out and asked me if that water was good to drink. I said "Yes." He asked "Does it run all the year round?" I said "Yes, even in August, and it never gets any smaller than this." He said "I would give $20,000 to have that creek run through my plantation." He then went on to say that he owned a tobacco plantation in the flats along the Mississippi river in the State of Louisiana and that there wasn't a drop of drinking water on the whole plantation except cistern water and, as a matter of fact, he stated that they brought all their drinking water in bottles from the nearest city. This incident always made me appreciate the spring creeks and brings me to the village of St. Johns.

The village is situated in the Township of Thorold, about two and one-half miles north of the village of Fonthill and six or seven miles south westerly from the city of St. Catharines.

The only historical reference I have been able to find regarding the village is on a map published by George R. and G. M. Tremaine dated 1862, which states that George Brooks is proprietor of the grist and saw mill; R. Collins & Sons proprietors of the Woollen factory and iron foundries; Charles Fell is a merchant; John W. [illegible] is proprietor of iron foundries and manufactures stoves, plows and other agricultural implements.

This map gives an illustration of Collins' woollen factory and foundry, which shows a four-storey woollen factory, a large foundry and two large residences. Running through the village from Fonthill is a beautiful spring-creek which has its rise in the

village of Fonthill, flows the year round and is of sufficient volume and has enough fall for power purposes in a small way.

The main street of the village, running nearly east and west, forms part of the Dundas road, a highway on which stage-coaches ran from Fort Erie to Dundas before Hamilton was in existence.

The village appears to have reached its height of prosperity about the year 1830, and mills had been erected, supplied by power from the creek, as far back as the latter part of the eighteenth century. Records in the registry office show, and old residents say, that at this time there was a Wesleyan-Methodist Church and an Episcopal-Methodist Church; there was also a large hotel or road-house; there were several large general stores, a tannery, harness shop, wagon and carriage shop, blacksmith shop, one or two saw mills, two grist-mills, several woollen mills and one or more carding mills.

St. Johns was in its prime before Welland was started. The building of the Welland Canal feeder, which gave the little hamlet of Merrittsville water power, was one of the causes of the growth of Merrittsville, now Welland, and of the decadence of St. Johns. There is on file in the registry office, an old plan prepared by Zenas Fell, of an improved highway called the St. Johns, Fonthill and Merrittsville Plank Road. The road was to be constructed of heavy plank, 10 feet long, laid on substantial stringers. Part of this road was actually built and is now the highway running north from Aqueduct Street, still commonly known as the Plank Road.

The power at this early date was developed by means of over-shot water wheels, the only style of water wheels at that time in use. In those early days more men were employed in the several factories owing to the large amount of hand-work instead of machinery. For instance, a wagon or buggy would be built complete, the wheels, iron work—all being turned out by hand.

The village at this time had quite a large population. The residents appear to have lived comfortably and to have been contented and happy.

The Court House in Welland, started in 1856, was heated with stoves made in St. Johns, and if the writer is not mistaken one of these stoves is still used for heating purposes in the township hall in Ridgeway, in the Township of Bertie.

Zenas Fell, a land surveyor, was one of the early settlers in the village of St. Johns. Charles Fell, one of his sons, carried on a general store here for many years. The Tuckers also carried on a general store in St. Johns.

Today, St. Johns may aptly be called "The Deserted Village." There is one grist-mill still standing, but it has been idle for about thirty years. The last carding mill, later known as the Pim mill, at the west end of the village, which, though complete with its machinery, has not been running for a good many years, was torn down this summer. The writer was fortunate enough to obtain a photograph of the old over-shot water wheel just before it was torn down.

The population has dwindled to about twenty or thirty people. Both churches have been torn down or removed. The cemeteries are uncared for. The old Zenas Fell homestead, which is situated on the south side of the Dundas road or Main Street of the village, is being torn down this summer. This gentleman's residence, which must have been built seventy or eighty years ago, has not been occupied for the last ten or twelve years, and presented a splendid example of old-time carpentry and masonry. The front entrance to this old house, the main part of which is still standing, though surrounded and grown up with shrubs, is handsome, and when one considers that all the mouldings, sashes and doors were made entirely by hand, shows that the carpenters of the old days must have served a long apprenticeship. The stairway in the front hall is winding, with a walnut rail and light walnut balusters, and it would worry many of the craftsmen of today to build it. Between the parlor and sitting-room are fireplaces which, together with the hearth, are built of cut stone with a black wood mantle; one fire-place in the parlor and one in the sitting-room, and though unoccupied and unlocked, a tablet bearing the name "Zenas Fell" in large raised letters was on the parlor mantle up to a year ago. The kitchen of this old homestead is large and has a fire-place with a swinging crane for use in cooking, and a smaller brick oven at one side for baking bread, cakes, &c. The kitchen fire-place was so deep that the sides were built in as cupboards or shelves.

Nearly everyone has left St. Johns. Apparently what has happened to St. Johns has happened to almost every other small

rural village in the Niagara Peninsula, and probably throughout the province.

In the old days when the only power was wind and water the early settlers availed themselves of even the smallest water power, and St. Johns was particularly favored from the fact that the stream here supplied power the year round, while many of the streams, especially the Twelve-mile creek at Jordan, only supplied water through the spring and fall.

The early settlers therefore built their mills at the point of the water supply. The building of the railways stopped the traffic on the Dundas highway. The coming of the steam engine allowed the mill owners and manufacturers to locate their factories at the most convenient point and operate them cheaply by steam, as wood, the fuel then used, was very cheap.

It must be remembered that the saw-mills of those old days were not the saw-mills of today. The saw went up and down, the power being supplied at the bottom of a frame large enough for the log to pass through and which the water wheel pulled down and a large wooden spring pulled up. It took time to saw a board. The writer remembers one of them run by one man. He would start the saw cutting at the log and then go away, having a string attached to the gate of the waterwheel at one end and to the log carriageway at the other, so that when the saw got through the log the carriage would pull the cord, drop the gate to the waterwheel which would stop, and the old man would come back, carry away the board that was cut and re-set and start the next cutting—and even at that he cut quite a lot of boards in a day, and while the saw millers of today might turn up their noses at the old man's mill, he certainly would laugh at some of the logs they try to cut into boards today. In those days you did not bring a log to mill that was not fit to make shingles.

What prosperity the steam-engine left to St. Johns has been absolutely taken away by the development of electrical power, and the only hope the writer sees for the future of the village is to develop its natural resources in the way of parks and public play grounds and as a summer resort. One may travel from Nova Scotia to British Columbia and not find more beautiful scenery than in the St. Johns-Effingham valley. The streams could be controlled

in such a way as to make splendid bathing pools for the children with all the advantages of the Great Lakes without the danger In the meantime we may say of the St Johns-Effingham brooks

Men may come and men may go
But I go on forever

THE HISTORY OF THE NIAGARA GORGE

By D. D. Grow

Many books have been written on the Niagara Gorge and it will only be possible to touch briefly on a few of the most outstanding characteristics of this, one of the most wonderful of Nature's masterpieces.

The natural beauties of the Niagara River throughout its entire length are less appreciated by those in close proximity than by the thousands of tourists who travel each year from the four corners of the globe to see them.

Some time ago I became rather curious as to why and how this river came into existence and into its present formation and I made some investigations, the results of which it is the purpose of this article to relate.

To find the origin of this river and gorge we must travel back many thousands of years into the past; how many thousands geologists hesitate to say. At one time this whole district was covered with a glacier in what is known as the "Wisconsin Ice Age." This barrier of ice is estimated to have been about 3000 feet thick. The Niagara district remained continuously under the burden of the ice not only during the entire time that the front of the ice sheet was retreating from a point about ten miles north of the Ohio River at Cincinnati to Niagara Falls, but during an equally long time probably in the period of advancement.

Shortly after the retreat of the ice had uncovered the present site of the Niagara Gorge this district was covered with water. This condition continued until the further retreat of the ice which was retreating in a north-easterly direction opened an outlet on the northward sloping hills south of Syracuse, N.Y. The result of this new outlet was that the waters in the Lake Ontario basin

were drawn down to a somewhat lower level than the present level of Lake Erie. This completed the separation of Lake Erie from Lake Ontario and inaugurated the flow of the Niagara River, and Niagara Falls began the work of making the Gorge at the escarpment at Queenston.

In addition to the flow through the Lewiston spillway four other spillways were inaugurated at the same time, one at Holley, N. Y., one at Medina, N. Y., one at Gasport, N. Y., and the fourth at Lockport. The life of each of these spillways was comparatively short, as they were no doubt smaller than the Lewiston spillway which wore its way into the rock much more quickly than the others and has become the only outlet for the waters of the Great Lakes.

The process of gorge-making is interesting. The gorge has been and is being elongated by boring at the base of the Falls where the heavy mass of falling water strikes at the end of its vertical descent. The softer strata are slowly worn away by the impact of the water itself, but the hard capping layer is removed chiefly by undermining until it falls away in huge blocks. The blocks which drop in the caldron at the foot become highly efficient tools for grinding away the shale, for no doubt many of them are whirled around in the violent current like pestle stones in the making of potholes.

When the falls had large volume and full height the thinner hard layers were bored through and removed, but when the height of the falls was reduced as it was in one part of the gorge, or where the water sheet pouring over the crest became thin or divided in several places, parts of these beds were not removed and now form benches or terraces. When the volume of the river was relatively small, as it was in two sections of the gorge, these layers were not bored through by one vertical plunge but in all probability formed separate cataracts, one for each hard layer. As Spencer has pointed out this was probably the condition for a time in the older part of the gorge north of the Niagara University. After the relatively narrow shale section of the gorge had been made by the small cataract the rush of the volume of the river through these sections deepened them still further by the slower and very different process of chute or rapids erosion. The deepening of the old narrow gorge north of the Niagara University has been substantially completed in this way; that of the gorge whirlpool rapids is now in progress.

Of very great importance in understanding the history of the gorge is the r[illegible] of the Great Lakes to the history of the Niagara River [illegible] with the exception of a few small streams, furnish the wh[illegible] of the supply of water for the River.

Since Niagara River [illegible] began, the Great Lakes have passed through five different stages, each stage being a different one than that of the preceding stage, and the volume of water discharged from the Niagara River varied with each change.

The first stage is known as the "Early Lake Algonquin Stage." This lake occupied the south half of the Lake Huron basin and received a considerable amount of water from the lakes in the Georgian Bay district and Lake Simcoe district. At that time the ice barrier spanned Lake Huron from side to side and no water was received from the Lake Michigan or Lake Superior regions. The volume of discharge was probably equal to the present discharge due to the tributaries coming in directly from the ice sheet. It was during this period that the first or oldest section known as the "Lewiston Branch Gorge" was created. This gorge extends about 2000 feet south from the mouth of the gorge. The average top width is about 1900 feet, the depth is about 300 feet to the bottom of the river, which is 20 to 30 feet deep and 600 feet wide.

The second stage of the Great Lakes is known as the "Lake Algonquin-Kirkfield Stage." This lake occupied the basins of Lakes Superior, Michigan and Huron, in addition to some low lying lands bordering upon them. It did not attain its full extent in this stage, however, because the ice barrier still occupied large areas lying along its northern side, so besides carrying the full discharge of the upper Great Lakes, Lake Algonquin in this stage received a large flow of water directly from the ice sheet and its total discharge was probably greater than the present volume of the St. Clair River. The outlet was Kirkfield, Ontario, down the valley of the Trent River to glacial Lake Iroquois, which was in part a contemporary of Lake Algonquin. Lake Iroquois occupied the Lake Ontario basin and extended to the foot of the escarpment at Queenston. During this period the second section or old narrow gorge was formed. This gorge extends from the south end of the first section to the bend at Niagara University, a distance of about 1⅛ mile. The top width is about 1100 feet, the depth to the bot-

tom of the river is nearly 400 feet; the river is about 500 feet broad, 80 to 90 feet deep and quite turbulent. The flow of the Niagara River at this time consisted only of the discharge of Lake Erie or about 15 per cent of its present volume.

The third period or stage of the Great Lakes is called the "Lake Algonquin-Port Huron Stage." The extent of Lake Algonquin in this period was about the same as the earlier stage. There was a general uplift of northern lands which shifted the outlet from Kirkfield to Port Huron. This same uplift raised considerable areas above the level of the lake but a greater area was added by the gradual retreat of the ice sheet. In the early part of this period, Lake Algonquin received a considerable inflow directly from the ice sheet but in the latter part the ice sheet had become so small that its contributions were insignificant. In the first half of this period there was a large discharge at Chicago as well as at Port Huron, but in spite of this the flow at Port Huron was slightly larger than the present river. During the first portion of the period the flow of the river was slightly larger than at present and in the second half a trifle less on account of the Chicago discharge and the Niagara River was affected correspondingly.

It was during this period that the Lower Great Gorge was formed. This gorge extends from the bend below Niagara University, where the gorge widens to the upper side of the Eddy Basin. Its width between the cliff lines from the bend south about 2000 feet averages more than 1600 feet and at the widest is about 1825 feet. Above the north end of Wintergreen Terrace the width is from 900 to 1300. The extra width is due partly to the augmented volume of the river and partly to the wide flat floor above the falls which caused the water flowing to be spread to unusual width. During this period geological changes caused Lake Iroquois to be about 125 feet higher than the present level of Lake Ontario and at a later time in the period the lake again receded.

These changes occurred when the falls was at the head of Foster's Flats. There is a rock which produces the sharp rapids at the outlet of the Whirlpool which owes its origin to the breaking away of the east wall of the Whirlpool before the vertical fall had time to carve out the sand stone at its base, then continuing their work the falls cut out the Eddy Basin before the volume of the river was reduced.

The fourth stage of the Great Lakes is known as the "Nipissing Great Lakes." It was caused by the withdrawal of the ice sheet from the Ottawa Valley. These lakes consisted of the three upper lake basins and their area was only slightly larger than the present lakes. The outlet during this stage was east from the northern parts of the Georgian Bay region, its head being at North Bay, Ontario. The scouring effects of the outlet river are well marked in the valleys of the Mattawa and Ottawa rivers and indicate a river having the same volume as that of the present St. Clair River. During this period the gorge of the Whirlpool Rapids was formed. This gorge is about three-quarters of a mile long and extends from the upper side of the eddy basin to the head of the gorge just above the railway bridges. The average top width is about 750 feet, the average width at the water line is about 250 feet. During the formation of this gorge the river carried again only the discharge of Lake Erie.

The fifth stage of the Great Lakes is the "Present Great Lakes Stage." The continued uplift of lands in the north raised the outlet at North Bay and again sent the discharge of the Upper Lakes to Port Huron. In transition it is probable that both outlets were active at once but this apparently did not last long. The change of outlet to Port Huron brought the Nipissing great lakes to an end and inaugurated the present system which has continued ever since.

The gorge created and in process of creation runs from just above the railroad bridge to the Horseshoe Falls. It is about two and one-quarter miles long and its average width north of the American Falls is about 1,330 feet, widening opposite the American Falls to 1,600 feet. The depth of the river is about 80 to 200 feet.

It is interesting to note a few of the characteristics of the Whirlpool. It has long been recognized that the rock basin of the Whirlpool is older than the remainder of the present Niagara Gorge and has a very different history. It is a buried drift-filled gorge of the inter-glacial age. The walls surrounding it on the east and west sides are rock bluffs but on the north and northwest sides the entire wall from the top down to an undetermined depth is composed of sand and gravel. South of the village of St. Davids there is a strongly marked re-entrant in the front of the escarpment

the head of which shows no rock for about a mile, but is a steep and much gullied slope of drift. One cannot resist the impression that this buried gorge was made by an inter-glacial Niagara substantially identical in volume with the present Niagara Falls. Then came the ice sheet completely filling the old gorge which has been uncovered by the present cataract.

Various estimates have been made by geologists as to the age of the Falls. In 1841 Lyell estimated the age of the Falls to be 35,000 years. Surveys made since then afford some basis for calculation. In 1894 Spencer calculated the total duration to be 32,000 years, but in a later report in 1907 he makes it 39,000 years. The present rate of recession of the Horseshoe Falls is estimated to be 5.5 feet annually, while that of the American Falls is only .2 feet for the same period. This is accounted for by the fact that approximately 95 per cent of the water flows over the Horseshoe Falls, leaving only a small portion for the American Falls. The average depth of water on the American Falls is about 18 inches with a maximum depth of 5.5 feet, while the estimates of depth of the Horseshoe Falls run from an average depth of 6 feet to a maximum depth of 20 to 25 feet.

In closing I wish to pay tribute to those geologists and writers whose investigations and efforts have put the information I have just given at our disposal. They are E. M. Kindle and Frank B. Taylor of the United States Geological Department, also J. W. Spencer who has written a book entitled "The Falls of Niagara

GOVERNOR SIMCOE VISITS WELLAND

By Ernest Green, Ottawa

It is perhaps not generally known that Colonel John Graves Simcoe, first Lieutenant-Governor of the Province of Upper Canada, once visited the site of the future city of Welland. The presence here of the representative of His Majesty King George III. was made the occasion of no special ceremony or celebration—chiefly because there was no one here at all to raise the customary flag, fire the usual salute or bore His Excellency with an address of welcome. The banks of the Welland River (then newly so christened by Simcoe himself) were clothed with unbroken virgin forest.

Simcoe, on his part, probably paid no particular attention to the spot where the future county town was to stand. Perhaps he noted that there was a big bend in the stream just here, but we cannot suppose that he had any vision of a canal and aqueduct, of a mass of industries or of a populous community with a court house in its midst. In Simcoe's mind court house would merely recall the vexing problem of how the embryonic town of Newark was to be provided with judicial buildings of sufficient size to serve the whole country between the Trent and Long Point.

Simcoe's mode of approaching Welland's site was unique. No Governor of later days has come to us in the same way nor from the same direction. Simcoe came down the Welland River in a canoe.

It was in the early autumn of 1795. The head of the new province was vigorously carrying on his exploratory work of all the regions lying north of York (Toronto) and westward to the Detroit frontier. The summer had been intensely hot and the humidity of the forest-clad lowlands and the lake made Navy Hall an uncomfortable dwelling-place, so the Simcoes had been board-

ing since the twelfth of August at the house of Mrs. Tice, widow of Major Gilbert Tice, which was on the Portage Road at Stamford not far from the present Half-way House. On the 25th Simcoe, though in poor health, planned an exploratory trip to Long Point and the Grand River (which he had named the Ouse), and his wife and little son accompanied him to Fort Chippawa, where they passed the night, and on to Fort Erie the next day, the Governor having an acute attack en route which compelled him to rest in a farm-house for some time.

At Fort Erie they lodged at a farm-house two miles back of the post. On the 29th Mrs. Simcoe and little Francis started back to Stamford while her husband set off up the lake. Of his adventures during the next two weeks Mrs. Simcoe's "Diary" gives this brief account:

> "Sat. 12th Sept.—The Governor returned and is far from well. He was pleased with Long Point, which he called Charlotteville. The banks on the lake 250 feet high; on the shore grew weeping willows covered with vines; he gathered some grapes, already sweet. He returned up the Grand River, from thence crossed a short portage into the Welland, which he descended to Fort Chippawa. He went part of the journey on horseback, and was much annoyed by passing wasps' nests. The wasps stung the horses terribly."

So there you have all that we know about it. It is highly improbable that the Governor, feeble of health, weary from an arduous journey through the wilderness and tormented by wasp stings, would pause to spend another night under canvas when within ten miles of Fort Chippawa and fourteen from his wife and son. He arrived home on September 12th and we may assume with confidence that it was on that day he was paddled by the site of future Welland. He was the first man of note known to have visited this spot.

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Four papers read to the society are not included for the reason that they are to be issued in the forthcoming publication of the "Papers and Records of the Ontario Historical Society," and will thus be available to the public.

BIBLIOGRAPHY OF THE FENIAN RAID

Somerville—*Narrative of the Fenian Invasion of Canada*

Campbell—*The Fenian Invasions of Canada of 1866 and 1870*

Dent—*Last Forty Years. Correspondence Relating to the Fenian Invasion Ottawa 1869*

Trials of the Fenian Prisoners at Toronto Who Were Captured at Fort Erie C W in June 1866 Ed by George R Greig and E P Rodes

McMicken—*Fenian Raid on Manitoba* (Manitoba Hist and Sc Society) 1884

Hannay—*History of New Brunswick.*

Macdonald—*Troublous Times in Canada*

Denison—*Soldiering in Canada and The Fenian Raid on Fort Erie*

Stephen Beatty—*Fenian Raid, 1866* St Catharines 1910

PUBLICATIONS OF
THE WELLAND COUNTY HISTORICAL SOCIETY

Vol I 1924—The Centenary of the Welland Canal

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THE FENIAN RAID OF 1866

By General E. A. Cruikshank, LL.D., F.R.S.C.,
F.R. Hist. S.

After the lapse of nearly sixty years, the Fenian invasion of Canada in 1866 seems a supremely foolish adventure, doomed to inevitable failure, and it is difficult to recall the alarm, excitement, and bitter controversies which followed. Few lives were lost and little damage was done to property, but some useful lessons may yet be drawn from the events of that time.

The Fenian conspiracy grew out of the Young Ireland agitation of 1848. James Stephens, its acknowledged founder, had been implicated in the abortive insurrection organized by William Smith O'Brien and was slightly wounded in an encounter with the Constabulary, but escaped to France where he lived quietly for seven or eight years. Some time in 1857 he was solicited by John O'Mahony and other fellow conspirators, who had taken refuge in the United States and prospered, to undertake the management of a new revolutionary movement in Ireland for the support of which they promised to supply all the necessary money. Indeed, one of these fugitives had in fact written enthusiastically from New York not very long after his arrival in that city, declaring that "we have the long arm of the lever over here." This was the poet and orator, Thomas D'Arcy Magee, who soon went to Canada and entered political life, but in the course of a few years saw reason to change his opinions materially. Stephens, who at the time needed money badly, went to Ireland and set to work with a will during the following year, when he began to form secret military societies or associations, consisting generally of from fifty to one hundred and fifty members each, to which he gave the name of "Fenian Circles." Tradition relates that the ancient militia of

Ireland were styled Fenians. Sir Walter Scott in the Antiquary refers to the bare-armed Fenians, and the conspirators thought that they had hit upon a good name at last. The chief of each circle was known as its centre. The officers next in rank were designated by the letters A, B, C, &c. All authority for the time being was vested in the centre, and in the event of his death or absence, his next subordinate succeeded automatically to his place and authority. The ordinary members took a solemn oath to obey orders only and knew scarcely anything of the plans of their leaders. By such precautions it was hoped that it would not be possible for them to betray or reveal their projects prematurely as had so often been the case in the past. Military exercises were frequently practised in lonely places and on large a proportion of the militia regiments were known to be enrolled in these circles that the government deemed it expedient to disband them in several of the southern and western counties. The Fenian organization spread rapidly to the United States, Canada and Australia. In the City of New York particularly it soon became very strong and practically gained control of its municipal government. A mayor of the city distinguished himself by ordering the green flag bearing the harp without the crown to be flown over the city hall on St. Patrick's Day, and attired himself in green clothing on that anniversary to proclaim his sympathy with the Fenian movement in the most significant manner. Large sums of money were collected for the prosecution of the conspiracy, amounting it was affirmed, to more than a million of dollars within seven years in the United States alone, of which, however, Stephens admitted that he had received not more than $150,000, and it was presumed that the balance had been expended by the self-appointed leaders in that country to support themselves in luxurious indolence.

Irishmen were encouraged to join the Federal army in the civil war to acquire military knowledge and experience and many exclusively Irish regiments were recruited. One of these, the 69th New York, was commanded by Michael Corcoran an active Fenian, who had been a policeman, but later became a saloon keeper in the city of New York. Corcoran was taken prisoner at the first battle of Bull Run and after being exchanged was promoted to command a brigade. Thomas Francis Meagher popularly known

in the rebellion of '48 as "Meagher of the sword," also commanded a distinctively "Irish Brigade." Under such favourable auspices Fenianism naturally flourished in the United States and spread through the armies of the North.

The controversy with Great Britain caused by the detention of the *Trent* and the arrest of the Confederate envoys on board was regarded by the Fenian leaders as giving them a favourable opportunity for beginning a public demonstration, and a meeting was held in the Rotunda in Dublin, which was well attended, and resolutions of sympathy with the United States were adopted.

In 1862 Stephens reported to his colleagues that fifty thousand men had been enrolled in Ireland and the funeral of Terence Bellew McManus, one of the leading insurgents in '48, who had died in California, but was brought back to Cork for burial, was made the excuse for another immense popular demonstration. Next year he began the publication of a newspaper called the "Irish People," which soon obtained a wide circulation. A provisional government had already been organized with offices in Union Square, New York, and in the winter of 1863-4 a general convention was held in Chicago, at which Colonel John O'Mahony was elected President of the Irish Republican Brotherhood. He had attended Trinity College, Dublin, and was a fluent and effective speaker. Like Stephens, Meagher, McGee, and others, he had been associated with Smith O'Brien in the rising of '48. His military rank was derived from his temporary command of a regiment of New York volunteers in the civil war. Subsequently an "Irish Fair" was organized in Chicago, which Stephens visited and was welcomed with boisterous enthusiasm as the "Chief Organizer of the Irish Republic." An official report presented to him at this time stated that 613 Fenian "circles" had been formed in America, eighty of which were located in the British provinces.

About the same time O'Mahony visited Montreal and was entertained at a dinner, when violently seditious speeches were warmly applauded. This provoked an open letter from McGee, then a member of parliament for one of the divisions of the city and lately President of the Council in Sandfield Macdonald's cabinet. It was addressed to the Irishmen of Montreal, warning them to have nothing to do with American agitators and Fenianism, which

he described as "a mere will of the wisp and a delusion." O'Mahony promptly retorted by denouncing McGee as "a Judas" and a "traitor" to the professions of his youth, to which McGee rejoined by a scornful reference to O'Mahony as "a crackbrained enthusiast who has already been twice confined in a lunatic asylum."

A second large convention of Fenians was held at Cincinnati in January, 1865, which was reported to have been attended by 1700 delegates. A constitution for an Irish Republic was formally adopted. O'Mahony was re-elected President and the convention then proceeded to elect a Senate and Secretaries of State, War and Finance. An issue of government bonds was authorized and a military council was appointed, of which Brigadier General McRorty of the United States Volunteers was named as chairman. In April of that year the civil war was ended and within a short time nearly a million of soldiers were discharged from military employment. The labour market was at once greatly congested. Two confidential agents, of whom one was P. J. Meehan, editor of the "Irish World" of New York, were sent to Ireland to arrange with Stephens for an immediate insurrection, in which they expected to obtain the assistance of many of these disbanded soldiers. Some of the Fenian leaders openly boasted that their officers were on their way to Ireland to raise an army to achieve its independence and asserted that two hundred thousand Irishmen had fought in the Federal armies, of whom a large number were sworn Fenians, who could be relied on to assist them. It was observed that almost every ship arriving at the Irish ports from the United States landed a number of mysterious strangers of a military appearance, who quietly made their way inland. But the government had reliable sources of information from which they learned all that was going on. A well-informed Irish writer, who cannot be suspected of any unfriendly bias, relates that "every considerable gathering of Fenians had among its members at least one person who generally professed a yet fiercer devotion to the cause than any of the rest and who was in the habit of carrying to Dublin Castle every night his official report of what his Fenian colleagues were doing." Be that as it may, soon after his arrival Meehan lost an important letter addressed by O'Mahony to Stephens as "chief organizer," which soon came into the hands of the police

On the night of September 15 the office of the "Irish People" was raided, its editors were arrested, and many incriminating documents were seized. Stephens evaded arrest until November 11, when he was taken at his lodgings in the suburbs of Dublin. Two weeks later it was announced that he had escaped from Richmond prison, and after remaining in hiding for several weeks, he got away to France.

Meanwhile the organization in America had been daily gaining strength and its leaders were literally forced to undertake some enterprise to satisfy the clamour of the rank and file. Ireland was far away and strongly garrisoned. To promote an insurrection was a difficult and dangerous affair. The British Provinces were close at hand and comparatively defenceless. Many of their inhabitants were supposed to be discontented with their government and it was confidently anticipated that, with the possible exception of the fortress of Quebec, the whole of Canada could be taken in a single short and almost bloodless campaign. The Fenian "circles" in Toronto and Montreal were reported to be particularly strong and zealous. McDermott, the "centre" of a New York "circle", announced that he had attended an open air meeting of Fenians in Queen's Park, Toronto, on the evening of 5 November 1864, at which rebellion had been openly advocated and that the authorities had not dared to interfere because they knew that 800 men in the city were fully armed and in readiness to protect the speakers. If five thousand men invaded western Canada, he declared, the people would rise in a body and demand annexation to the United States. A large number of Fenians soon pronounced themselves in favour of such an invasion and O'Mahony incurred much unpopularity by refusing to sanction it at once. Finally, when he undertook to place the bonds of the Irish Republic on the market he was summarily deposed by the "Senate" and Colonel William R. Roberts, who was known to favour it, was elected in his place.

The new President lost no time in announcing his policy. "Let us march on the frontier," he said. "The Government of Canada is imbecile. Ottawa, the capital city, can easily be taken by a handful of Fenians, who can throw up works and hold it against any force the Canadian Government is prepared to send

against them until reinforced. What a thrilling effect such an achievement would have throughout Europe! We must go to Canada and fight it out there. The war has commenced in Ireland, the Fenians must follow it up here and hit England in a tender spot. Colonel Sweeney, his Secretary of War, published a circular urging an effective military organization and promising deeds, not words.

But O'Mahony was still powerful, and at the general convention held in January, 1866, he was triumphantly re-elected President by a great majority over Roberts. His rival, however, refused to submit to this decision and proceeded to make a tour of the cities on the great lakes. He addressed large and enthusiastic gatherings in Buffalo, Cleveland, Detroit and Chicago, while Sweeney, his chief lieutenant, had a like favourable reception at meetings held in New York, Troy, Burlington, Philadelphia and St. Louis. They announced that subscriptions were pouring in at the rate of $15,000 a day and that the time for action was near. It was stated that three regiments were drilling every night at Buffalo and that arms and munitions were being rapidly accumulated in that city for their use.

Their grandiose plan of campaign still sounds impressive:

> Detroit, Rochester, Plattsburg and Portland are appointed rendezvous for the troops and the forces at Detroit and Rochester are to attack Hamilton and London, while other forces are to move from Ogdensburg and Plattsburg upon Montreal. When the Canadian borders are once crossed, bases of operation will be established in the enemy's country so that international quarrels with Washington may be avoided. It is expected to have a million and a half dollars of ready cash to give transportation for thirty thousand men for one month. Of this force eight thousand will carry the line of the Grand Trunk west of Hamilton, while five thousand will cross from Rochester to Cobourg prepared to move east or west either to assist the three thousand who will cross at Wolfe Island to Kingston or take part with the western detachment in capturing Toronto. This, it is thought, will occupy two weeks. Thus entrenched securely in Upper Canada, holding all the lines of the Grand Trunk Railway with sufficient rolling stock secured to control the said lines, the Fenians hope to attract to their colors fifty thousand American Irishmen and equip a navy on Lakes Huron, Erie and Ontario. This having been accomplished, thirty thousand men, under General Sweeney, will move

down the St Lawrence upon Kingston simultaneously with ten thousand by the line of Chambly and these will converge upon Montreal

It was at the same time asserted that an officer of high rank in the army of the United States had offered to lead the army of invasion and the name of the distinguished Confederate General Fitz-Hugh Lee was also mentioned in that connection

Such an extensive scheme of aggression naturally caused much alarm in Canada as there could no longer be any doubt of the formidable character of the organization For nearly a year three provisional battalions of volunteer infantry had been stationed in small detachments at posts along the Detroit Niagara and St Lawrence Rivers On the 7th of March 1866 the Executive Council of Canada decided to call into active service for an indefinite period an additional force of ten thousand volunteers which was accordingly done that day by telegraph and responded to with gratifying alacrity

By this time O Mahony had been induced to modify his views sufficiently to sanction an expedition to take possession of the island of Campo Bello in Passamaquoddy Bay which being then claimed by both Great Britain and the United States he professed to consider as neutral territory and might be occupied by a Fenian force as a base for future operations without provoking hostilities with either power The treasurer of his wing of the Brotherhood F Doran Killian was put in charge of this enterprise which resulted in a complete and ridiculous failure attended with much privation and suffering among his deluded followers Thus fizzle as it was called by the newspapers had the effect of lulling the apprehensions of the Canadian ministry who were at the time seized by a sudden fit of economy and by an order of 21 April 1866 the whole of the volunteer force lately embodied was relieved from duty and the Militia Department even refused to approve the employment of a guard for the field guns of the Welland Battery which were in consequence removed to Hamilton for safety

Hon T D McGee continued fearlessly to assail with ridicule the farcical Irish Republic of Manhattan Island with an escaped lunatic for its President and its Senate composed of a shoemaker from Massachusetts a dealer in second hand goods from New

York a plumber from Rhode Island a candy dealer from Illinois and such like men from other States This Bilmingsgate behavior reeling and dishevelled from the purlieus of New York with blasphemy on her lips and all unclealiness in her breast he exclaimed with florid rhetoric this shameless impostor I resist with scorn and detestation About the same time O Mahony announced that he had received letters from Canadian circles protesting against any Fenian invasion of Canada

On May 11 James Stephens arrived at New York from Paris O Mahony at once tendered him his resignation of his office as President but Roberts declined to follow his example On the 15th an immense outdoor meeting was held at Jones's Wood at which more than sixty Fenian circles proudly paraded with bands and banners Among the celebrities who came there to welcome the renowned Chief Organizer were Major General Joseph Hooker formerly in command of the Federal Army of the Potomac Brigadier-General Ruggles and Colonel Reilly of the United States regular army Stephens told his hearers that the circles in Ireland numbered two hundred thousand members, of whom fifty thousand were well trained in military exercises

For several years both the British and Canadian governments had employed secret agents to collect information in various parts of the United States one of whom, as is now known was the noted Major Le Caron who constantly made full reports The movements of the Fenians could not elude the observation of enterprising correspondents of the daily newspapers On May 27 a despatch from Nashville in Tennessee dated the day before was published in many papers in the United States announcing that more than a thousand dollars had been invested that day in Fenian bonds and that several parties had left the city for the northern frontier On May 29 the *Cincinnati Commercial* said There is a movement of Fenians now going on Quite a number of them left the city yesterday bound for Canada Large shipments of arms have been made northward within a few days There is an opinion that an extensive raid is to be made upon Canada Movements of men and transportation of arms have been in progress for several days with a degree of secrecy that indicates business On the same day a despatch sent out from Cleveland Ohio stated

that "There or four hundred Fenians partially armed and carrying colors officered by men with sidearms passed here last night They were orderly and quiet and claimed to be marching to Calfornia to work on the railroads" Commenting on these reports in an editorial on May 30 the *Buffalo Courier* said that the knowing ones in the Brotherhood there laughed at them and declared that the whole story was a hoax but added that they were "a shrewd set" and people might wake up some bright morning to find that Canada had been invaded or captured but the Canadian Johnnie Bulls are not frightened this time and the frontier does not bristle with bayonets" On the same morning the *New York Herald* announced that Mayor Wells of Buffalo had telegraphed to the Mayor of Hamilton in Canada that six hundred Fenians had left Cleveland for Buffalo and that the spare rolling stock of the Great Western Railway was being sent away from Hamilton in consequence The manager of that railway however made a written denial of that statement as soon as it was brought to his notice In the course of the last day of May many inhabitants of Buffalo observed that considerable parties of strangers whom they supposed to be Fenians had arrived in that city on the two preceding days They had come in bands or parties of varying numbers mainly from the south and west and kept together as they strolled about the streets When questioned, some of them stated that they were going to Canada to look for work on the railroads while others said they were discharged soldiers on their way to California which seemed scarcely credible as it was known that they had come from Cleveland and Cincinnati or even from Indianapolis and Chicago Mr H W Hemans, the British Consul telegraphed this information that afternoon to Major-General Napier, who was in command of the First Military District of Canada having his headquarters at Toronto

At least one Fenian regiment designated as the Buffalo 9th Regiment Irish Army of Liberation, had been organized in that city and was formally presented with a battle-flag by a group of women who sympathized with the cause early in May There is little doubt that the parties who came from a distance were warmly welcomed and well taken care of by their friends living in Buffalo, who were many and some of them prosperous and influen-

tral in politics. The *Buffalo Express*, whose proprietor was of English birth, had published accounts with large headlines, of the assembling of a large body of Fenians in Buffalo, which were consistently ignored or even ridiculed by its rival *The Commercial Advertiser*, recognized as the local organ of the Federal Government. On the streets of Fort Erie that afternoon and evening it was a subject of common talk that the Fenians intended to cross that night, but as this had been reported so often before, few people believed it. The *Morning Courier*, which bears the date of Friday, June 1, and which must have left the press before three o'clock a.m., in an article probably written about midnight, remarked that it had purposely abstained from making any reference before to the arrival of a considerable body of Fenians in the city in the expectation that their intentions would soon be more fully known, but it was then ascertained that 300 had come in on the preceding Wednesday and 200 more on Thursday, who were then quartered in the Dudley and Townsend Halls near the foot of Main Street close to the harbour. These men had little to say as to their destination except that they were looking for work. The collector of customs for the port of Buffalo by a public advertisement printed in the same paper forbade the clearance of any ship or boat between 9 a.m. and 4 p.m. without a special inspection by the customs officials and absolutely prohibited the departure of any vessel from the harbour between 4 p.m. and 9 a.m. until further orders were received from the Treasury Department. The steam revenue cutter Michigan had arrived from Erie to assist in the enforcement of these regulations. Telegrams received in the night announced that other bodies of Fenians were assembling near Malone on the frontier of Lower Canada and at Detroit. When this paper was distributed a landing had already been made in Canada by the Fenians assembled in Buffalo, which was duly reported in a second edition by a reporter who witnessed their embarkation. The *Express* had been less reticent and printed fuller reports of Fenian movements.

It is certain that the Canadian military and civil authorities in Canada had received reliable information of the contemplated raid in ample time to send a sufficient force to the Niagara to have opposed an invasion. But, apparently influenced by motives of

false economy, they contented themselves with warning the commanding officers of units of the volunteer militia to be in readiness for active service.

In fact, Colonel John O'Neill, commanding the 13th Fenian Regiment, had entrained that body of men at Nashville on May 27. At Louisville, Kentucky, and at Indianapolis, his force was considerably increased by other parties and on the evening of the 28th it arrived at Cleveland where he expected to find a vessel waiting to transport it across Lake Erie to Canada, but a telegram ordered him to go on by rail to Buffalo. That night he again entrained with 342 men and reached Buffalo early next morning. At the Union Ironworks, a mile from the station, the train was stopped and the men were marched into the city in small parties to escape observation. A large Fenian mass meeting had been held in St. James's Hall the night before, at which it was said that large maps of Canada were exhibited and the enthusiasm of the audience was stimulated by a general invitation to come forward and select their farms now. The excitement and ardour of the local "circles" was at its highest point. A large quantity of arms and accoutrements had been shipped to Patrick O'Day, a local auctioneer and leading Fenian, who advertised an immense sale of military stores to begin on the following Friday (June 1) at 10 a.m. A reporter who visited his auction rooms on Pearl Street found them crammed with unopened chests. Early in the evening of May 31, about 1500 men assembled at the Fenian drill halls and other meeting places near the docks, many of them already armed and equipped, but before long they marched off again in bands of about fifty men in different directions. Their first plan had been to embark in the harbour but the orders issued by the Collector blocked this. Another proposal to seize the steam car ferry of the Buffalo and Lake Huron Railway at its dock could not be carried out because that boat had been moored for the night on the Canadian side of the river. Instead of returning to their quarters or homes for the night as was expected, the various detachments of Fenians marched quickly and silently by several parallel routes to the suburbs of Lower Black Rock, five miles distant, where nine wagons loaded with arms and equipments were waiting at the canal-bridge and two steam tugs and four canal boats lay in readiness at Pratt's

wharf to convey them across the river. Brigadier-General Lynch had been assigned to command the expedition but as he failed to appear, Colonel O'Neill promptly took charge as the senior officer present.

Born in County Cavan in 1834, O'Neill had come to the United States when a mere child and had served for eight years in the regular and the volunteer cavalry, rising by merit from the ranks to be a captain and had been recommended for further promotion when the civil war came to an end. In Sherman's "Great March," he had acted under the command of Kilpatrick and learned the art of gaining intelligence and subsisting troops on a hostile country as practised by that able and ruthless leader. After leaving the army he had conducted a pension agency in Nashville by which he kept in close touch with many disbanded soldiers in that region. In person, he was of medium height, spare and well built, having keen, aquiline features, a light moustache and close-cut hair. His appearance was alert and soldierly and his manner quiet and courteous. He seems to have been a sincere and unselfish enthusiast. His defence of the raid was brief and frank. "You recognize the English Government as your government and the English flag as your flag. We desire to destroy both. Hence our only cause of quarrel with you. If we had been able we would not have hesitated to kill every soldier who was ready to fight for England." As a soldier he was brave, quick in coming to a decision, and resourceful.

The brigade of which he then assumed the command consisted of his own regiment, the 13th Tennessee from Nashville; the 17th Kentucky, Colonel Owen Starr, from Louisville; the 18th Ohio, Colonel John Grace, from Cleveland; the 7th New York, Colonel John Hoey, from Buffalo, and an independent company from Terre Haute, Indiana, commanded by Captain Hugh Haggerty. O'Neill states its entire strength at about 800, but other estimates carry it as high as 1,500 and even 2,000. Most of the officers and many others were veteran soldiers, inured to war by long experience, accustomed to endure privations and fatigue and quite capable of taking care of themselves in the field. Nearly all the officers wore the blue uniform of the Federal Army, but few of the men had any military clothing or any distinguishing dress except that many of

them were wearing green shirts and black belts. Each unit carried a large green silk battle-flag with a gold harp or sunburst embroidered or painted on it. The flag borne by the 7th Regiment, considerably tattered, is now preserved in the Museum of the Buffalo Historical Society.

About midnight the advance guard, commanded by Colonel Starr, who had also served under Kilpatrick, crossed over in a canal-boat, towed by one of the tugs, and landed quietly at Freebury's wharf in the Township of Bertie, less than two miles below the village of Fort Erie. At 3.15 a.m. the remainder, with the exception of about one hundred for whom there was no room, embarked in the four canal boats, which were then towed across by both tugs. It is also stated that about forty men, completely clothed in blue Federal uniforms, came down the river in row-boats from Buffalo and joined O'Neill in the early morning.

The theatre of the ensuing operations may be roughly described as lying within an equilateral triangle, bounded on one side by Lake Erie and on another by the Niagara River, of which the site of old Fort Erie is the apex and the base is formed by a line drawn from Chippawa on the river to Port Colborne on the lake, the distance from any one of these points to any other being nearly sixteen miles as the crow flies. The International Bridge had not been built and the town of Bridgeburg was not in existence, the ground it now occupies being farm land under cultivation with about half a dozen dwellings upon it fronting the river. At Fort Erie Village was stationed a "lookout party" of five or six men of the Royal Canadian Rifles under a non-commissioned officer, who were unarmed and wore civilian clothing. Their duty seems to have been to watch for deserters from the regular British regiments who might attempt to make their escape to the United States. These men were all veterans of long service and approved good conduct. The river between Fort Erie and Black Rock is a thousand yards in width and flows at the rate of six miles an hour. A ferry between Fort Erie Village and the suburb of Buffalo then known as Black Rock was carried on in daylight hours by a steamer of about one hundred tons burden, which landed and embarked its passengers and carriages at a wharf exactly opposite the Fort Erie post-office, on which stood a small wooden building used as a cus-

tom house. This vessel burned wood in its furnace and long piles of cordwood lined each side of the gangway across the wharf. Another ferry for passengers only was casually conducted by rowboats between Freebury's wharf and Frank's wharf at Lower Black Rock. The only stream flowing into Lake Erie between Fort Erie and Port Colborne worth mention is the Six Mile Creek about that distance up the lake, which in the summer is insignificant in size. Falling into the Niagara are Frenchman's Creek, a few hundred yards below Freebury's wharf, in dry weather fordable a quarter of a mile from its mouth; Miller's Creek of about the same size three miles further down; and Black Creek six miles above, which was unfordable as far up as Chippawa, the small village of Stevensville on its west branch four miles from its mouth. A road from Fort Erie, now known as the Niagara Boulevard, followed the river closely all the way to Chippawa. It was very narrow in a few places and liable to obstruction by the removal of the wooden bridges over these creeks.

The Township of Bertie, out of which the village of Fort Erie had been incorporated nine years before, originally contained 38,000 acres and with the exception of the irregular frontage on the river and lake was laid out in blocks of forty by fifty chains with a road allowance on all sides of each block. It extended westward along Lake Erie for ten miles and its river front, being very winding, was about nine miles long. Twelve hundred acres had been separated from this township to form the corporation of Fort Erie, having a shore line of about three miles on lake and river and extending from the river due westward for more than half a mile. The main village contained perhaps six hundred inhabitants and most of the houses, shops and taverns of which it consisted were built on the west side of the river road facing the river. Half a dozen other streets at right angles to this main street had been opened on an irregular alluvial flat elevated only a few feet above the ordinary level of the river, about a mile in extreme length by not more than three hundred yards in width at its widest part. Each of these streets had a few scattered houses. With the exception of two large brick dwellings all the buildings were constructed of wood. A railway embankment extended along the river front for about half a mile from the northern end of the village

outside of which were three good-sized wharves and a few petty boat-houses. Behind the village rose abruptly a clay bluff, the ancient bank of the river, some forty feet in height. On it stood one good brick residence and some distance back a small negro settlement formed of small wooden cottages.

Three parallel clay roads, half a mile apart, named the Garrison, Bertie, and Gilmore roads, led due westward from Fort Erie. Another, a mile further down, began on the bank of the river near Freebury's wharf, and was generally known as the Bowen road from a family of that name living near it. They passed through a gently undulating and thinly wooded country, mostly well cultivated with crops of grain and grass, rising gradually until the Limestone Ridge was gained. This natural elevation begins near the shore of Lake Erie at Point Abino and sweeps around in a northeasterly direction until within a mile of the Niagara River when it turns sharply eastward. Along its western margin ran a natural road, first upon a ridge of gravel and then over a bare shelf of limestone rock, which in early days became a much travelled highway between lake and river, being passable at all seasons of the year. The shallow but well sheltered bay in lee of the high sand hills of Point Abino was the only anchorage at the lower end of Lake Erie which was protected from the prevailing southwest gales and the small sailing vessels employed in lake navigation at that time often disembarked their lading of bales of furs and barrels of potash at this haven. Those goods were conveyed in wagons or sleighs to the mouth of Miller's Creek where they were shipped in river-boats to Chippawa. Their return cargoes of manufactured articles were occasionally brought overland by the same route. By this road too, the boats were carried secretly with which Captain Dobbs and his seamen performed a notable exploit off Fort Erie in August, 1814.

On its western side the ridge descends, sometimes abruptly, forty or fifty feet into a broad and fertile valley through which flows the eastern branch of Black Creek which rises in a small marsh close to the shore of Lake Erie.

Fort Erie Village was connected by a recently constructed railway with Chippawa and Niagara, running fairly close to the bank of Niagara River and crossing the several creeks flowing into it

near their mouths by wooden bridges. Another railway the Buffalo Brantford and Lake Huron ran westward from a dock in the corporation of Fort Erie about a mile south of the village proper and a quarter of a mile north of the ruins of the fort. This line crossed Six Mile Creek on a wooden bridge and had its first station and siding at Ridgeway on the Limestone Ridge where there was a village consisting of a flour-mill, a couple of stores and fifteen or twenty houses and shops besides two or three taverns. Its next station was at Fort Colborne, but trains stopped when signalled at Sherkston midway. A third railway, following the Welland Canal on its eastern side connected Fort Colborne on Lake Erie with Port Dalhousie on Lake Ontario. A fourth line, called then the Great Western connected Hamilton and Toronto with Niagara Falls.

The cars of the Buffalo and Lake Huron Railway were conveyed to and from Buffalo by a steam-ferry capable of carrying twenty cars at a trip. Its yards were near the dock but the round-house for the care of locomotives was situated at the north end of the main village, and was connected with the yards by a spur. On the shore of the lake beyond the ruins of the fort stood fifteen or more small houses occupied by the families of fishermen. To the west and north of the fort was a tract of ordnance lands containing about a thousand acres most of it heavily wooded with ash and elm trees of considerable size. Part of this tract near the Garrison Road along its northern limit had been cleared and brought under cultivation. That portion nearest the road had been subdivided into five-acre plots on which cottages had been built for a dozen families of army pensioners who had occupied them for some years. The locomotive crews and most of the yardmen of the Buffalo and Lake Huron Railway lived in Fort Erie village but there was no traffic connection between that line and the new railway to Niagara.

The landing of the main body of Fenians was observed by a party of young men from the country who were spearing fish by torch-light at the mill-race in the river. They drove rapidly homeward drumming upon their wagon boxes and raising an alarm at every house they passed. The news spread swiftly and the roads were soon thronged with led horses and herds of cattle being driven off to some place of greater security.

O'Neill soon after landing ordered Colonel Starr with his regiment to occupy Fort Erie village and take possession of the railway yard above. This was done about sunrise but the railway officials had taken the alarm and hastily made up all their rolling stock into one huge train drawn by four locomotives which moved slowly off when the invaders came in sight of it. Captain Geary of the 17th Kentucky with a few men went in pursuit on a hand car but gave up the chase on arriving at Sauerwein's bridge over the Six Mile Creek which he burned and then tore up some of the track nearby. At that hour of the day he might easily have gone on to Port Colborne without opposition and destroyed the canal-lock there. Starr posted sentries at the taverns and ferry landing and made a requisition upon Dr. Kempson the Reeve for a supply of provisions and the instant delivery of all horses in the possession of the inhabitants. His men were kept well under control and no depredations were committed. The village council was assembled and decided to comply as far as lay in their power. Provisions were collected and delivered together with about a dozen horses. The men of the lookout party were put under arrest without resistance and paraded. After cutting the telegraph wires and permitting his men to breakfast in the open air Starr called in his sentries and patrols and marched off to rejoin the main body at the camp it had formed in the orchard and fields of Thomas Newbigging, a Justice of the Peace on the right bank of Frenchman's Creek about two miles from the River Road. The planks of the bridge were taken up and a hasty breastwork was built of these with fence-rails and other materials for defence against an attack from the direction of Chippawa. Foraging and scouring parties had gone out on several directions and soon returned with a number of fine horses and several wagons loaded with provisions and poultry. Fires were built of fence-rails and the camp assumed the appearance of a large and merry picnic party. A large and well armed detachment commanded by Captain Donohue marched down the River Road as far as the mouth of Miller's Creek and burned the bridge there. Early in the forenoon the United States revenue cutter *Michigan* steamed down the river from Buffalo harbour and anchored near the wharf at the foot of Ferry Street in Black Rock. The captain of the ferry boat was warned that the customs officers

would not permit him to take any passengers over to Canada, but this regulation, it would appear, was not rigidly enforced as a man carrying a saddle was seen to go on board some afternoon. No embargo was placed on passengers who wished to leave Canada and some of the inhabitants of Fort Erie took advantage of this to remove their families and valuable property across the river.

The steam-ferry continued to make hourly trips to and fro and it is probable that some unarmed men joined O Niull by this route. Enterprising newspaper reporters certainly visited his camp and made notes of what they saw. Row-boats were constantly crossing at the lower ferry, bringing food and small accessions of men, by which his strength may have increased to a thousand of all ranks. About eleven o'clock a.m., a tug towing two canal boats, loaded with arms and supplies of various kinds came over and landed their cargo at Feathery's whirlf, where it was loaded on wagons and taken to the camp. The captain of the *Michigan* attempted to weigh anchor but seeing that he would be too late to intercept these boats in American waters decided to remain where he was, being unwilling as he stated, to risk his ship further down the river without having a qualified pilot on board. At noon he began to fire a salute of fifteen minute-guns in honor of Lieutenant-General Winfield Scott who was being buried that day at West Point. This caused some excitement on both sides of the river as it was at first supposed that he was bombarding the Fenian camp. About the middle of the afternoon the *Michigan* dropped down stream and moored at Erie's wharf putting an end to the despatch of further reinforcements or supplies from that point. During the day, Major General George G. Meade commanding the Military Division of the Atlantic arrived in Buffalo and appointed Major-General W. F. Barry to command the District of Ontario, extending from Erie Pa. to Oswego N.Y., both places included, with headquarters at Buffalo. His orders to Barry were clear and explicit:

"I direct you to use the force at your command to preserve the neutrality by preventing the crossing of armed bodies by cutting off reinforcements and supplies by seizing all arms, ammunition etc. which you have reason to believe are destined to be used unlawfully, and in fine taking all measures precautionary or otherwise to prevent violations of the law. For the purpose you will

move the forces at your command to such points as are threatened and you shall employ such tugs or vessels as can be procured for watching the river and lake shores, and taking all such measures as to your judgement the emergency requires.

The force at troops at Barry's disposal was actually very small and was mainly at Fort Niagara only a single weak company of infantry and a gun-squad of artillerymen being stationed at Buffalo. Two river tugs were promptly hired manned with seamen and each of them armed with single light gun to patrol the river and prevent the passage of reinforcements and supplies which was effectually done.

The exact nature of the instructions given O'Neill if he received any, has not been revealed. It is conceivered that his main object was to damage the Welland Canal. Thus he might readily have accomplished by sending a strong party of mounted men with explosives to destroy the aqueduct at Welland which was ingnarded. Early in the forenoon he had secured forty or fifty horses and others could have been picked up by the way. The day was fair and sunny but not hot the roads were smooth and firm but not dusty grass and grain were abundant in the fields and granaries. The country was fair with the flowers and verdure of early summer. Altogether conditions were ideal for a raid of this kind but he made no attempt to carry it out. He had besides been joined by Major John C. Canty who had resided at Fort Erie village for the past six months with his family specially for the purpose of obtaining information. He had made himself well acquainted with the surrounding country and knew many of the inhabitants. Thenceforth he acted as O'Neill's principal intelligence officer and chief of staff.

Reporters employed by three daily newspapers published at Buffalo visited the Fenian encampment at Frenchman's Creek during the afternoon. They stated that they saw officers studying maps cooks preparing food while most of the men not on outpost duty or absent scouting were quietly sleeping under the orchard trees or in hastily improvised shelters. A scouting party which returned from an unexpected direction caused an alarm in which three were hurt and a man was wounded.

About five o clock p.m. Colonel John Hoey with two hundred men of the Buffalo regiment marched down the River Road. After advancing five or six miles he saw a group of horsemen approaching, who turned about and rode rapidly away. Surmising them to be British civilian scouts he halted and sent back a message. About the same time O Neill was informed from another source that a body of British regulars and volunteers had arrived at Niagara Falls and was preparing to advance against him by rail, and he quickly determined to meet it on the line of Black Creek, which he presumed had already been occupied by his advanced party under Hoey. The river was already so closely patrolled by Parry's orders that he relied on the chief hope of being reinforced and ordered the destruction of about a thousand spare muskets and some reserve ammunition, for which he had no means of transport. Some of his men had been drinking to excess at Stevens tavern near the landing and a brawl followed in which one of them was killed.

Between nine and ten o clock p.m. he began his march to support Hoey who had been instructed to move on to Black Creek but after advancing about four miles on the River Road and crossing Mallon Creek turned westward on the town-line road between the Townships of Bertie and Willoughby. After reaching the Erie and Niagara Railway the column was halted, outposts were sent out to occupy the railway and road bridges over Black Creek and the rest of his men were allowed to lie down in the fields on both sides of the track. There he waited for the expected attack. It was a very secluded spot as there were no houses within a mile and the town line road was little travelled. The time was about midnight. He asserted that his force had already been reduced by desertion and straggling to not more than five hundred and his statement is partly corroborated by the large number of stragglers who were seen on the river road next morning. About midnight it appears that he received further information stating that force at Chippawa consisted of a battery of Royal artillery, a regiment of regular infantry, a troop of cavalry and two volunteer infantry regiments which would advance next morning by road as waggons were being engaged for the transport of supplies. A little later he was informed that a smaller body of troops without

artillery or cavalry, and entirely composed of volunteer infantry, was preparing to entrain at Port Colborne for Fort Erie early in the morning. His decision was soon made for at three o'clock he gave orders to rouse his men and after allowing them a few minutes to prepare and eat their breakfast, marched southward through the fields until he reached the Ridge Road at Buck's tavern, where it was intersected by the Bowen Road. During this march across lots, a farm wagon conveying reserve ammunition broke down and he was forced to abandon part of its valuable contents. His intention, he stated in his report, was "to get between the columns and if possible defeat one of them before the other could come to its assistance." He seems to have known that the force at Port Colborne was the weaker of the two in numbers as well as inferior in military value and hoped to intercept it near the place where its progress would be checked by the break in the railway. His agents for obtaining intelligence must have been uncommonly active and successful in the night.

Dew lay heavily on the grass and the march through the fields in the dim morning light had been tiring and he found it expedient to make another short halt to close up the rear of his column. The road he had now gained commanded a wide view of the country to the west and south, it was sheltered in many places from the rays of the rising sun which already portended a very hot day, and the approach of any hostile force could be easily discovered at a considerable distance. The march was continued by that road toward the Ridgeway station on the Buffalo and Lake Huron Railway, less than three miles distant.

The regular troops in the western parts of Upper Canada were a battery of Royal Artillery and the 16th and 47th Regiments of Foot, quartered in nearly equal proportions at Toronto, Hamilton and London. About four thousand volunteer militia had been organized and received some training in the cities and towns, mostly as infantry. Although an invasion had been threatened and in fact expected for several months, no part of this force had been efficiently organized or equipped for field service. There was but one squadron of volunteer cavalry, the Governor-General's Body Guard of Toronto, which could not be made available in less than twenty-four hours. There were no engineers, army service corps,

signalling or telegraph units and no arrangements had been made for subsisting troops in the field or transporting their supplies except by rail. No systematic method of collecting or transmitting information had been devised. Regular and volunteer troops alike had been drilled for parade purposes only instead of being trained for the emergencies of actual warfare. None of the military lessons of the recent Civil War had been laid to heart.

St. Catharines was the nominal headquarters of a field battery of artillery which, as already mentioned, had been relieved of the care of its guns, and of two battalions of volunteer infantry, the 19th and 20th composed of companies organized to that town and the neighbouring villages from Niagara Falls to Grimsby. Another battalion of volunteers, the 13th, had been organized for some years in Hamilton and two others, the 2nd Queen's Own and the 10th were in Toronto. The commanding officers of all these units had been warned the night before to be in readiness for active service. At 6 o'clock in the morning, General Napier, who was in Toronto, received a telegram from the watchful British consul at Buffalo stating that six hundred Fenians had landed near Fort Erie. That was soon after followed by another from some other source estimating their number at 1,340, provided with six guns and a few muskets. Napier gave orders at once for the immediate movement of all available troops at Toronto and Hamilton toward the Niagara frontier. Before noon Colonel George Peacocke of the 16th Regiment arrived at Niagara Falls by a special train with a battery of the Royal Artillery having six guns and wagons fully horsed, three companies of his own regiment and three of the 47th. He did not advance further until about dark when, being informed that the enemy were marching down the River Road, he went forward with his infantry by rail to secure the bridges over the creek at Chippawa, instructing his artillery to follow by road, as he feared from the want of proper cars to convey the guns. Chippawa was occupied at 9 p.m. and Peacocke then sent out some young civilians on horseback to ascertain the position of the invaders. They learned that they were in camp somewhere near the mouth of Black Creek, but as they had not been accompanied by an officer, their information was rather vague and unsatisfactory. Before they had returned, about midnight, Peacocke had been informed

that a force of about nine hundred volunteers, composed of the Queen's Own Rifles 480 the 13th 265 the York and Caledonia Rifle Companies 95 and the Welland Canal Field Battery 60 was being assembled at Fort Colborne and he instructed Captain Akers of the Royal Engineers who was acting as his intelligence officer to ride across the country *and order the commanding officer to move his whole force by rail not later than 5 31 a.m. and march to join him at Stevensville at 10 a.m. next day.* The route of this movement was unfortunately selected as the station at Ridgeway was three-quarters of a mile further east than Stevensville and the column would be continuously exposed to an attack on its march on a flank. The danger of contact with the enemy would have been lessened by detraining a mile east of Sherkston and the distance to march would not have been as far. At that season of the year there was little difference in the quality of the roads. But the only topographical guide Colonel Peacocke possessed was a postoffice map showing the mail routes and the mail-route southward from Stevensville was marked thereon as reaching Ridgeway by the Ridge Road. This was considered a sufficient reason for instructing the force at Fort Colborne to detrain at that place and follow the mail-carrier's route to Stevensville.

A portion of the long train of cars went off from Port Erie jumped the track on its flight and was detched three miles east of Port Colborne but during the day the line was cleared and a working party under escort of a detachment of the Welland Battery was sent to rebuild Sauerwein's Bridge. Mr Robert Larmour the road superintendent went on in a hand-car to Fort Erie village where he arrived about 11 p.m. and found the place not only unoccupied by the Fenians but nearly deserted by its inhabitants. He met Mr Richard Graham, the Collector of Customs who had visited the Fenian camp in the afternoon and seen as he supposed their whole force. When he came away there was no indications of a movement and he had seen a good many drunken disorderly men. Mr Larmour persuaded Mr Graham to accompany him on his return to Fort Colborne believing that his local knowledge would be useful in future operations. On passing he found that Sauerwein's bridge had been made practicable for trains and the line was open once more. He returned to Fort Colborne about midnight with this encouraging information.

When Lieut Colonel Booker with the 13th Battalion had arrived there by rail from Hamilton about an hour previous he found Lieut Colonel J S Dennis the brigade major of the militia district in command whom he outranked and superseded The wildest rumors were in circulation and the Queen's Own and Welland Battery were standing under arms in the streets After hearing Mr Graham's statement Colonels Booker and Dennis agreed upon a plan of operations by which they hoped to cut off the retreat of the invaders and ensure the capture or destruction of their whole force Eighty men belonging to the Welland Battery and Dunnville Naval Brigade were to embark on the steam tug W T Robb which had just arrived with the latter small unit commanded by Captain Lachlan McCallum, proceed to Fort Erie and parrol the river while the rest of their force would advance by rail as far as seemed prudent and co-operate with Colonel Peacocke next day in a general attack upon the enemy's position While they were yet deliberating Captain Akers arrived and was persuaded to approve this plan At 3 a m a telegram was sent off to Colonel Peacocke and without waiting for a reply the detachment was embarked Colonel Dennis who desired an independent command went on board and the tug steamed away under his orders The rest of the force was again entrusted and was on the point of moving when at 3 45 a m a peremptory message was received from Peacocke saying that his original instructions must be obeyed and a junction formed with his command at Stevensville It was deemed inexpedient to detrain again for so short a time as the men had no quarters to go to Some of them had been drinking freely and were reckless and noisy There was little opportunity for any of them to sleep or even rest comfortably At 5 a m half an hour ahead of the time fixed an order was given for the train to start The force on board, ommitting Capt of all ranks, probably did not exceed 800 effective combatants They had been under arms for twenty-four hours in a feverish state of excitement and were fatigued by travel and standing about deprived of sleep, and insufficiently fed They had no blankets knapsacks haversacks mess-tins, or water-bottles and their only means of carrying their overcoats was by wearing them in midsummer weather The only horse with the column was brought by Colonel Booker and was taken to Fridgeway in a mail-car No effort appears to have

been made to mount any of the other field-officers. No facilities had been provided for transporting the reserve of ammunition after leaving the train nor for distributing it on arrival. There was no ambulance or hospital staff. Three surgeons were present, one of whom was not in uniform and carried his instruments in a small hand bag. Shortly before six o'clock the train arrived at Ridgeway and the men were quickly detrained at the platform. Few people were anywhere to be seen and little information on the actual situation was obtained. The farmhouses round about were in fact almost deserted and the inhabitants who remained kept close indoors. The writer had passed the night at the unfurnished farmhouse nearly equidistant between Ridgeway Stevensville and the Fenian bivouac near the mouth of Black Creek and well recollects how strangely calm and quiet the night seemed to be. The death-like stillness after nine o'clock was broken only by an occasional far-away shot, the sound of galloping hoofs or the barking of a dog.

Few of the officers or men were able to obtain anything to eat at this hour and much time was necessarily consumed in forming up, inspecting arms and distributing ammunition. Although some farm wagons could undoubtedly have been obtained had a proper effort been made to find them all the reserve ammunition was sent back to the train to Port Colborne. While preparations for marching off were still in progress some horsemen from the neighbourhood rode in with information that a body of Fenians was approaching by the Ridge Road but that a warning was duly stegarded. Their report indeed seemed highly improbable since the enemy were known to have been in camp at Frenchman's Creek ten miles distant late in the afternoon before. Yet those men had actually seen their advanced party and had been mistaken for mounted scouts. About half an hour later Booker began his march by the Ridge Road which as I recollect easterly was by no means a direct route to Stevensville. The sunshine was brilliant and already warm. The sky was cloudless and not a breath of air was stirring. It was a most delightful June morning but seemed the prelude to a very hot day. Meanwhile O'Neill had advanced along the Ridge Road for about a mile when his advanced scouts reported a group of horsemen riding rapidly away. It was certain

that they were not friends. Next the whistle of a locomotive travelling eastward was heard and the train was apparently coming to a stop. This was, after a short interval, succeeded by bugle calls which betokened the presence of troops. He continued, however, to advance until he was definitely warned of the approach of a body of soldiers on the same road, when he quickly occupied a position to resist an attack along the Bertie Road which intersects the Ridge Road nearly at right angles. A shallow ditch and a rail fence on its south side fringed with trees and shrubs afforded a certain amount of natural cover, which was hastily improved by pulling down the fence on the opposite side and setting up the rails on end against this fence, slanting forward, or building up A-shaped rifle-pits with rails, stones, or any materials at hand. His right rested on John Anger's brick house, barn, and other outbuildings, which with its kitchen-garden and a small orchard, stood in the southeast angle formed by the intersection of the roads, all of which were strongly occupied, and his line extended eastward five or six hundred yards with its left curving forward into a strip of maple woods on the crest of the ridge which here widens out to a breadth of about three hundred yards, sloping gently down to the Ridge Road and then dipping abruptly into the valley. By this disposition he planned to enfilade his assailants as they advanced along the road or over the cleared ground between it and the woods, which was much broken by orchards and clumps of trees. A small reserve was stationed in an orchard about three hundred yards in rear of his centre and a thin line of skirmishers was thrown forward nearly half a mile close to the Garrison Road under the enterprising Colonel Starr. O'Neill's force probably did not exceed 800 men, but they were the pick of his followers, well trained in fighting under cover, thoroughly alert and ready for action.

Colonel Booker's force had advanced in a column of fours with the Queen's Own under Major Gilmour leading, followed in succession by the 13th Battalion under Major Skinner, and the York and Caledonia Rifle companies, commanded by Captain R. H. Davis. On approaching the intersection of the Garrison Road, where in the north-west angle stood Michael Huffman's small roadside tavern, whose swinging sign boldly proclaimed it to be

the "Smuggler's Home," a few armed men were detected lurking behind fences and trees in front. The Trinity College company of the Queen's Own, which was armed with Spencer repeating rifles, was ordered to extend as a firing line. Some shots were fired and two other companies were sent forward at the double to prolong the firing line to both flanks. Within ten minutes the fire became rapid and continuous. *Standing out of doors some three miles away the writer heard the sound of the first intermittent shots, which were soon merged in a steady crash of musketry lasting for almost an hour.* It now seems marvellous that so few men were hurt by such a heavy and well-sustained fusillade.

Scarcely had the action begun when a telegram from Colonel Peacocke was placed in Colonel Booker's hands instructing him to defer his departure from Port Colborne for one hour as his own movement from Chippawa would be delayed. The encounter could still have been broken off without much difficulty, but as his men were full of confidence and seemed to be already driving the enemy before them with ease, Booker wrote a note in reply, saying that he was engaged and asking his commander to advance to his assistance as soon as he could. This was given to Detective Armstrong to be carried across country. The Fenian skirmishers were steadily forced back or more probably retired purposely to draw their opponents into the ambush that had been laid for them, usually reserving their fire until their pursuers attempted to climb over a fence or were checked by some other obstacle. After advancing in this manner over the fields for several hundred yards, it was discovered that the maple grove on their right was occupied by the enemy, who disclosed their position by firing prematurely, and the University and Highland companies of the Queen's Own were extended to the right front with orders to expel them. At the same time some of the Trinity College company worked their way down into the low ground west of the road, where the men were partly screened from view by the ledge of rocks, with the intention of turning the enemy's right. But within fifteen or twenty minutes the three companies first engaged were allowed to fire away nearly all their ammunition with little effect beyond enveloping themselves in a dense cloud of smoke, hanging low in the morning air, under cover of which they had advanced almost

half a mile. They were then close upon O'Neill a main position where he had decided to make a definite stand and they were practically disarmed. They were accordingly relieved by three companies of the 13th in scarlet coats, while the York Rifle company was sent down into the low ground on their left, all of them advancing at first very steadily in extended order. Separated from this new firing line by an interval of two or three hundred yards and forming an obtuse angle with it were the two companies of the Queen's Own on the right, still hotly engaged with the Fenians in the woods who were well protected behind the stout trunks of the hard-maple trees which were scarred for many years after with bullet marks. On the Ridge Road and in the fields on its right about three hundred yards in rear of the firing line were the remaining companies of the 13th and the Caledonia Rifles. About the same distance still further back were six companies of the Queen's Own in quarter column, including those which had just been withdrawn from action. After sending a message to the railway station to order forward the reserve ammunition which had been so carelessly left behind on the train, Colonel Booker had disappointed and remained near the reserve. In that point on he could not possibly see much that was going on in front and he had not a single mounted officer or orderly with him to transmit orders or gain information. His only means of conveying commands rapidly was by sound of the bugle. The new firing line had moved forward with such steadiness and good order that they were at first mistaken by the Fenians for regular troops in belief which was strengthened by the sight of the red coats. Availing themselves of a thicket as cover the York Rifles supported by a party of the 13th turned their right and their whole line deserted its barricades and retired upon its reserve hastily pursued. O'Neill himself stated that he "fell back a few hundred yards and formed a new line." At that moment some of his mounted men came suddenly in view around a bend in the Ridge Road, riding rapidly forward and another group of horsemen was seen on the valley on the left as it turns in a road leading straight to Stevensville. The latter were neighbouring farmers attracted as spectators by the sound of firing.

Some person then hastily raised the cry of cavalry which was rapidly passed along The firing line attempted to form rallying squares in the fields and then example was followed by the supports and reserve The Fenians front were quick to seize their opportunity and rushed forward with loud yells firing as they advanced while their comrades in the woods directed their fire with some effect at the supports Scarcely had these squares been formed when a bugle by Colonel Booker s orders sounded retire In an instant all was confusion and the retreat began in much haste and disorder It is needless to inquire where the panic started it ended in a headlong stampede The two companies of the Queen s Own on the right were isolated for a time and lost seven killed or wounded and two prisoners in covering off The pursuit was not pushed vigorously as the main body of the Fenians was halted near the Garrison Road but Starr with his regiment advanced as far as Ridgeway village Few prisoners were taken but in some way humorous because possessed of a Union Jack which was afterwards exhibited in Buffalo as the colors of the Queen s Own Being a rifle regiment that unit of course had no colors and this flag was certainly not a military standard

Colonel Booker seems to have abandoned at once all hope of rallying his men and resuming the advance The retreat was continued from Ridgeway station along the railway track towards Fort Colborne When about half way to that place, Mr Larmour met them with a locomotive and two flat cars bringing back the reserve ammunition By noon the disconcerted force was again at Fort Colborne utterly exhausted and dispirited Its total loss was too insignificant to account for so humiliating a reverse One officer Ensign McEachren Sergeant Mackinnon and seven privates were killed five officers and twenty-six other ranks were wounded seventeen of whom fell into the hands of the enemy besides seven unwounded prisoners O Neill stated his loss as nearly as it could be ascertained at eight killed and fifteen wounded It was probably greater as men were found dead and were buried on the field and six badly wounded men were left behind Among the killed was Lieutenant E R Lonergan of Buffalo and among the wounded were mentioned Captain Timothy Leaven and Michael Cochrane

color-sergeant of the Indians company a very gallant fellow who was shot down while leading the final charge with a large green flag in his hand

Well gratified with his success and dreading an encounter with a larger force which he believed to be advancing against him from Chippewa O Neill lost no time in beginning his retreat toward Fort Erie Scare marched down the railway track while the main body followed the Garrison Road taking with them their ten wounded prisoners

Colonel Booker was severely criticized by some newspapers for misconduct on this occasion and in consequence demanded a Court of Inquiry to investigate it which was granted The Court was composed of Lieutenant Colonels Denison Cluthuhn and Shanly who reported unanimously

That there was not the slightest foundation for the unfavorable imputations cast upon Lt -Colonel Booker in the public print That having fallen into error he promptly exerted himself to repair the effects of his error in person and in a manner which could leave no room upon his personal courage or conduct That from the time the expedition started until it arrived at Fort Erie it was under disadvantages with which Her Majesty s forces seldom have to contend That more than half of the two battalions were youths under twenty years of age very few accustomed to drill and many had never shot anything but a blank cartridge

The finding of the Court however failed to reinstate Colonel Booker in the good opinion of the general public

It is now necessary to follow the movements of Colonel J S Dennis Having embarked on board the *W T Robb* the Welland Canal Field Battery commanded by Captain Richard S King and the Dunnville Naval Brigade under Captain (afterwards Senator) Lachlan McCallum numbering in all eighty-seven of all ranks he left Fort Colborne about 3 30 a m and arrived at the Ferry Landing in Fort Erie village soon after daybreak Disembarking part of his force there he made a prisoner of every stranger who could not give a satisfactory account of himself Taking on board this detachment two hours later he dropped down stream to Freeburn s wharf where another landing was made to examine the deserted Fenian encampment A number of stragglers were picked up in the vicinity Strong patrols then marched down the River Road

and westward on the Bowen Road uniting on the River Road above the mouth of Black Creek where they were once more embarked on the tug which had come down to that point. There they were informed for the first time that the main body of the invaders had marched in the direction of Ridgeway early that morning. Fifty-eight prisoners had been taken and the tug was crowded to its utmost capacity. Returning to The Ferry Landing at Fort Erie about the middle of the afternoon the men of the Welland Battery and eighteen of the Naval Brigade were landed there. Scarcely had this been done when a horseman rode in at full speed to give warning that a body of Fenians whom he estimated at from six or eight hundred men was approaching by the Garrison Road. This voluntary messenger was Captain Lewis Palmer, a man over seventy years of age, who lived on that road about two miles west of the village. He had served as a private throughout the war of 1812 and had commanded a company of the Frontier Light Infantry in 1837. Captain Akers had driven into the country in the hope of getting into communication with Colonel Booker's force and had not returned. A few prisoners who had been confined in the village lock-up were hurried on board the tug but instead of withdrawing from a hopeless contest with overwhelming numbers Colonel Dennis formed his men in line on the River Road near the ferry-dock. A considerable party of Fenians first appeared on the crest of the high ground north of the Bertie Road near the brick house of James Stanton, well within range of rifle fire and began firing. Almost the first shot in reply deliberately aimed by Private Daniel Sullivan of the Royal Canadian Rifles who had joined Dennis as a volunteer severely wounded Lieutenant Colonel Michael Dudley of the Buffalo regiment, who was conspicuously mounted on a white horse and caused not a little confusion among his companions. A few minutes later a stronger force of the enemy came straight down the street from the south firing and shouting wildly as they advanced. The tug hastily cast loose from the wharf and was carried down stream by the current while the officers on shore ordered their men to scatter and save themselves any way they could. Dennis and McCallum with twenty-five or thirty others ran down the River Road and most of them eventually were taken on board the *Robb* which then steamed up the river under

fire and returned to Fort Colborne instead of remaining to protect the further retreat of the enemy which was still practicable Captain King with a few men put up a gallant resistance from behind the piles of cordwood on the wharf until he fell with his ankle shattered by a musket-ball As the enemy approached he emptied the remaining chambers of his revolver at them and threw himself into the river to escape their bayonets The current swept him under the wharf where he clung to its supports until rescued He was removed to a hospital in Buffalo where his leg was amputated at the knee

A few others were with a number of revolutionary men of whom had come from Buffalo out of mere curiosity took refuge in the large wooden post-office building which was speedily surrounded by yelling Fenians who began to riddle it with bullets at short range They returned this fire with good effect and despite the protests of the new combatants and the shrieks of the women and children who were made to lie down on the floor to escape the bullets crashing through the doors and windows kept their assailants at bay for a quarter of an hour The walls were stout and an attempt to force an entrance at a door was sharply repelled as which at least one of the attacking party was mortally wounded by a bayonet-thrust in the throat Finally a young woman in desperation waved a white table-cloth out of an upstairs window and the firing outside ceased Finding that their ammunition was nearly expended and that further resistance was plainly hopeless this gallant little party surrendered In all fifteen officers and thirty other ranks five of whom were wounded were made prisoners in this unfortunate affair The Fenians lost seven men killed or mortally hurt and had more than double that number wounded

An hour or two later O'Neill was informed by his scouts who were still active and kept him well advised that the force from Chippawa had advanced as far as the mouth of Black Creek and then turned inland He determined to retreat to the car-ferry dock near the ruins of Fort Erie in the hope of receiving reinforcements or making his escape in the night A message to that effect was successfully transmitted to Colonel Sweeney the Fenian Secretary of War who had come to Buffalo His spirits were raised by an account of a great meeting held in the opera house the night before

which had been addressed by Senator Fitzgerald of Cincinnati and Hon. John Murphy of Buffalo, when $1,300 in cash was subscribed in a few minutes, and the assurance given that hundreds of men had arrived in that city from all quarters, apparently eager to come to his assistance. The malicious satisfaction felt by some even of the better class of citizens at his successful landing was acridly expressed in an editorial published that morning in the *Commercial Advertiser*, then considered a very conservative newspaper:

> With the memory of the recent past action and sympathy of the Canadian people in behalf of the rebels still fresh in our minds, it is but natural that we should contemplate the present demonstration, and in fact any demonstration which may be made, as a retributive visitation over which we have no tears to shed.

Towards night he moved his whole force to the ruins of Fort Erie, about four miles above his original point of debarkation, within musket shot of the landing-place of the car-ferry, then lying on the opposite side of the river, and took up a good defensive position on its decayed earthworks, sending forward outposts to observe all probable ways of approach. He took with him all his prisoners who were able to march but left behind five of his own men who were too badly hurt to be removed. There he awaited further orders. His intentions were stated in his report in rather vaunting terms:

> About 6 o'clock p.m., June 2, I sent word to Captain Hynes and our friends in Buffalo, that the enemy could surround us before morning with 5,000 men fully provided with artillery, and that my little command, which had by this time considerably decreased, could not hold out long, but that if a movement was going on elsewhere, I was perfectly willing to make the old fort a slaughter pen, which I knew it would be next day if it remained. *For I would never have surrendered.*

His position was well chosen for either receiving reinforcements or embarking, as the *Michigan* still lay below at Pratt's wharf.

At 4.15 that morning Colonel Peacocke had been joined by 250 of the 47th Regiment from London, 415 of the 10th Battalion from Toronto, and 350 of the 19th Battalion from St. Catharines, increasing his strength to 1,400 of all ranks and arms, with six

field guns. He had planned to advance at 6 a.m. but the lack of efficient commissariat arrangements for so large a force made it impossible to get his men their breakfast in time and he postponed his departure for one hour sending a telegram to Colonel Booker to do the same. Although the best and most direct route was due southward by the Sodom road, a distance of only eight miles, his wretched map indicated that the road-route followed the River Road to the mouth of Black Creek thence southward to the Berrie-Willoughby town line then westward to New Germany and then southward again to Stevensville a roundabout course of at least eleven miles. Knowing that a body of the enemy had been near Black Creek on the night and having some lost contact with them for want of efficient mounted scouts of any kind Peacocke decided to take the longer route. An hour's delay became two and it was eight o'clock before he started. The bridge over Usher's Creek broken under the weight of the guns and caused considerable delay. The distant sound of machinery was heard but gradually died away. On arriving at Black Creek he found that the bridge had been destroyed and the enemy had marched off toward Ridgeway. Presently Detective Armstrong arrived with Booker's message. It was then 10.30 a.m. and he was still four miles from the scene of action. The head of the column was turned southward. The bridge on the town-line over another small stream broke down and again there was some delay. The heat had become excessive and as the regular troops were burdened with their knapsacks containing their full kit and carried besides sixty rounds of ammunition and were still wearing their heavy clothing they felt it greatly. Many of them had collapsed and one non-commissioned officer of the 47th died from the effects of sun-stroke. The informant on Peacocke had received made him anxious and he endeavoured to accelerate his march, riding himself with the advanced guard. On arriving at New Germany about 11.30 a.m. he received a message from the rear of the column informing him that the men were suffering much from the heat and dust and many were lagging behind or falling out in consequence. The officer commanding the battery indeed reported that his escort had so much diminished that he did not consider it safe to continue the march without having it increased. He decided then

to halt there and allow his men to rest and take their dinner. Infantry scouts were sent out and it was ascertained that Colonel Booker had retreated and a position at Stevensville with his force was no longer possible. At four o'clock a report was received that the Fenians had returned toward Fort Erie and orders were given to resume the advance in the cool of the evening. About half past five o'clock when a start was again made it was joined by the Governor-General's Body Guard a squadron of volunteer cavalry from Toronto commanded by Major G. T. Denison who on this was at once sent on in advance. The march was continued southward through Stevensville to the Bowen Road on which the head of the column was turned eastward. When the cavalry advanced guard had reached the house of Robert Bowen near the intersection of roads where the brick school house now stands, the leading patrol observed a group of men to the road ahead of them and in place where it was flanked by dense woods on either side for almost a mile. It was then nearly dark and in the uncertain light the actions of these men seemed suspicious and when approached they climbed over the fences and disappeared in the woods. A report was sent back and the whole column came to a halt. Colonel Peacocke himself rode forward accompanied by Captain Denison and other officers. Another reconnoitering party was sent out while men thought they saw a single sentry who also moved off the road into the woods. After some deliberation two companies of the 16th Regiment were ordered forward to search these woods in extended order. This was done but after stumbling about in the dark for half an hour and finding nobody and hearing nothing they were recalled and orders were given to march straight ahead with the intention of attacking the enemy who were then supposed to have returned to their first camp near the mouth of Frenchman's Creek. The men who had been seen were believed to be their advanced outposts. Bowen who was standing near Colonel Peacocke, then said that they could not go by that road as the bridge over French man's Creek had been destroyed. It was determined to turn aside on the road to the right where there was more cleared ground and breastwork. Strong outposts were established and orders given to be in readiness to resist a night attack. No fires were lighted and the horses were kept saddled or harnessed. The retreat of the in

vaders was then believed to be entirely cut off and they were expected to make a desperate resistance. In the course of the night Peacocke was informed that another considerable body of infantry under Colonel Lowry of the 47th Regiment, with four field guns, had arrived by rail at Black Creek, but at the same time a telegram from Buffalo asserted that reinforcements estimated at a number between two and three thousand men had crossed the river to join the enemy. He was reinforced by a volunteer battery of garrison artillery, without guns, which he had left behind at Chippawa. This intelligence made him wary, but his troops were roused at daybreak and ordered to breakfast at once and be in readiness to march at 5 a.m. Before a start was made Hon. John Hillyard Cameron, who had accompanied the other body of troops, which had come on in the night on the Erie and Niagara Railway and detrained at the crossing of Frenchman's Creek, came up the Bowen Road on horseback with intelligence that the enemy had escaped. When this force had detrained, Colonel (afterwards Lord) Wolseley, who was acting as a staff-officer for intelligence, had gone forward on horseback with a few men and learned that the remnant of the Fenian force, estimated at between five and seven hundred men, were on a large barge or canal-boat moored astern of the *Michigan* in United States waters in Niagara River. Peacocke's advance was resumed, marching southward and dividing into two columns, taking the Bertie and Garrison Roads when they reached them successively. The great body of woods on the Ordnance Reserve west of the ruins of Fort Erie was carefully searched by a long line of skirmishers with its right flank extending as far as the shore of Lake Erie. A few men, who were supposed to be stragglers from the raiders were seen and four of them were reported to have been shot.

The retreat of the enemy had been well managed. About 2 a.m. signals from their camp at the old fort were seen in Buffalo. Two powerful tugs with a large barge, which lay in readiness in Buffalo Creek, at once steamed out of the harbour and crossed the foot of the lake to the wharf of the Buffalo and Lake Huron Railway where the men from the neighboring bivouacs were quickly embarked. The *Michigan* was still moored at Pratt's wharf more than four miles down stream, and the picket boats engaged for

patrolling the river were not in sight. All the sick and wounded who were being cared for at the post-office and at station of Erie and Niagara Railway in Fort Erie Village which were temporarily converted into hospitals for them were abandoned with them at Fenandales. So hurried was the embarkation that the outposts were not called in and altogether it was believed that about 150 men were left behind. Forty of these were stated to have escaped later in small boats. When the tugs with the boat in tow were in mid-stream they were overtaken by the tug *Hairstone* employed as a patrol boat by General Barry. The two tugs on board which at one time several hundred of the raiders including the principal officers were concealed were allowed to proceed into Buffalo harbour where the passengers were placed under arrest by the United States Marshall but the barge was taken down the river and moored under the stern of the *Michigan* where the men on board were detained for several days in considerable discomfort until instructions were received from Washington to release them on receiving sureties that they would appear for trial. Both Captain Bryson of the *Michigan* and General Barry sent courteous messages to the commanding officer at Fort Erie assuring him of their readiness to co-operate to the full extent of the inability in preventing any repetition of the invasion. The general good conduct and even the good manners of most of the raiders was the subject of favourable comment among the inhabitants who had come in contact with them. They had not been guilty of any acts of indiscriminate plunder or violence of any kind on the march. Women were not molested or insulted and deserted houses were not broken open. Horses indeed were taken with carriages, harness and saddlery but this was in accordance with the usages of war to which they had become accustomed in the recent civil contest and proper steps were requisitioned in considerable quantities. These prisoners were treated with much consideration and even kindness that they had no cause of complaint.

On June 5th the Attorney General of the United States issued a rather tardy order to the district attorneys and marshals:

"By direction of the President, you are hereby instructed to cause the arrest of all prominent leading or conspicuous persons called Fenians who you may have probable cause to believe have been or may be guilty of violations of the neutrality laws of the United States

Next day President Johnson published a proclamation warning all citizens and residents of the United States of the penalties to which they would become liable by any infraction of the neutrality laws of the country or of the laws of nations. On the same day John O'Neill, Owen Starr, John Hoey, and other leaders of the raid appeared at the Erie County Court House in Buffalo and were admitted to bail in the sum of $6,000 each, which was readily furnished by local sympathizers. The Commissioner then informed them that they were discharged and at liberty to go wherever they wished, amid great applause from those present.

"An individual in the room proposed three cheers for the Colonel (O'Neill)," said the report published in the *Commercial Advertiser* of June 7, "and this was responded to in the most enthusiastic manner, the walls of the Court House fairly echoing with the loud huzzas."

The hero of the occasion was then escorted by his admirers to the Mansion House, then the principal hotel in the city, and in response to the clamorous outcry of an enormous crowd presently appeared on the balcony overlooking Main Street. He is reported to have said:

"Gentlemen! You may not be aware that I am no speech maker. The only kind of speeches I am accustomed to are such as are made from the cannon's mouth. Situated as I am at present I can only advise you to return to your homes peacefully and in an orderly manner. Good-by."

He left the city that night.

On June 8, General Barry, who seems to have executed his instructions in a thoroughly prompt and fearless manner, issued another drastic order:

"In compliance with instructions from Major-General Meade, in virtue of power vested in him by the President of the United States, the transportation over railroads, by water, or other kinds of public conveyance, of any persons or material of war designed or supposed to be designed to violate the neutrality laws, is forbidden. The transmission over the telegraph wires of messages in cypher or otherwise, from Fenians, or in matters relating to Fenian movements, is also forbidden.

"All persons are warned that any evasion or disregard of these prohibitions will be treated as aiding and abetting the violators of law."

The number of Fenians from other places who had come to Buffalo was still very large and he was extremely anxious that they should disperse and leave the vicinity of the frontier. His recommendation that they should be offered assistance to return to their former domiciles soon bore fruit in the following order which he published four days later:

Authority having been given by Maj. Gen. Meade to furnish transportation upon certain conditions to all Fenians now assembled on the Northern Front or who desire to return to their homes and are without the means of defraying their own expenses, public notice is hereby given of the fact. All such persons now in Buffalo or its vicinity who desire to avail themselves of this opportunity and who will give their written parole to desist from any further attempts to invade Canada and to return quietly to their homes will be furnished immediate transportation.[1]

Those who attempted to take advantage of this offer next day were mobbed by their recalcitrant comrades on their way to the train and taunted as being cowards and traitors. On June 14 General Meade arrived in Buffalo and after a consultation with General Barry they decided to supply transportation unconditionally for all who still remained and this modification of the order had the desired effect.

President Johnson was caustically criticized by many of his countrymen who at that time were in a particularly critical mood toward him. Some blamed him for not having issued his proclamation earlier and some denounced him for not using it when he did. In his message to Congress at the end of the year he considered it necessary to justify himself at considerable length in a rather spineless manner, making at the same time a singular misstatement as to the date of the raid.

On the 6th of June last, in violation of our neutrality laws, he wrote, a military expedition and enterprise against the British North American colonies was projected and attempted to be carried out within the territory and jurisdiction of the United States. In obedience to the obligation imposed upon the Executive by the Constitution to see that the laws are faithfully executed, all citizens were warned by proclamation against taking part in or aiding such unlawful proceedings and the proper civil, military, and naval officers were directed to take all necessary measures for the enforcement of the laws. The expedition failed, but it has not been

without an painful consequences Some of our citizens who it was alleged were engaged in the expedition were captured and have been brought to trial as for a capital offence in the Province of Canada Judgment and sentence of death have been pronounced against some wh in others have been acquitted Fully believing in the maxim of government that severity of civil punishment in misguided persons who have engaged in revolutionary attempts which have disastrously failed s unsound and unwise such representations have been made to the British Government in behalf of the convicted persons as being misinformed by so ind ghtened and humane judgment well it is hoped induces it then cases an unrestricted exercise of clemency and a judicious amnesty to all who were engaged in the movement Counsel has been employed by the Government to defend nuinons of the United States on trial for capital offences in Canada and a discontinuance of the prosecutions which were instituted in the courts of the United States against those who took part in the expedition has been directed

I have regarded the expedition as not only political in its nature but as also on a great measure one got from the United States in its causes adventurer and objects The attempt was understood to be made in sympathy with an insurgent party in Ireland and by making use of British Provinces on this continent was designed to aid in obtaining redress for political grievances which it was asserted the people of Ireland had suffered at the hands of the British Government during a period of several centuries The persons engaged in it were wholly natives of that country some of whom had while others had not become citizens of the United States under our general laws of naturalization Complaints of misgovernment in Ireland could hardly engage the attention of the British nation and no great insurrection now prevailing in Ireland that the British Government have deemed it necessary to suspend the writ of *habeas corpus* in that country These circumstances must necessarily modify the opinion we might otherwise have entertained in regard to an armed invasion expressly prohibited by our municipality laws So long as those laws remain upon our statute books they should be faithfully executed and if they operate harshly unjustly or oppressively Congress alone can apply the remedy by their modification or repeal

None of the raiders were ever brought to trial in the United States the district attorney as the President s message shows having been instructed to enter a *nolle prosequi* O Neil s official letter although written immediately after his return from Fort Erie was kept secret for obvious reasons Four years later after the ignominious failure of another attempt at invasion of the

frontier of Lower Canada...on 25 May 1870 also directed by him it was published in New York It is a candid and straightforward narrative in the main probably truthful and comparatively free from bombast

RECOLLECTIONS OF THE BATTLE OF RIDGEWAY

By J. F. Dunn, Ridgeway

You have given us the subject of my address today, "Recollections of the Fenian Raid." I would not lead you to think I really witnessed the events I am about to describe. My home at that time was twelve miles from the battlefield. Four years after the battle I came to Ridgeway, a boy just out of school. A trip to the battle ground always had an attraction for me, and I have had exceptional opportunities of securing data. I feel quite sure I shall be able to leave with you some information not before published.

I am indebted for data to Andrew Benner of Ridgeway who, although near his 80th year, is still hale and hearty. Mr. Benner followed the Canadian troops from Ridgeway to the battle ground and witnessed nearly all of the battle. To the late Jacob Steinman who helped bury the Fenian dead, and to Patrick O'Dea, Jr., son of Patrick O'Dea of Buffalo, N.Y., the Fenian Secretary of War. Patrick O'Dea, Senior, up to a few decades ago, could often be seen on Main Street, conspicuous by the large green harp embroidered on his left arm. His contribution to the "cause" was $250,000.

His son used to come into the Main Street music store in which during the winter months I was employed as a salesman and buy pianos for his houses. As I rented a room from him on Franklin Street, I got to know him pretty well and he gave me a very highly colored engraving of the Battle of Ridgeway as he put it, "painted from an Irishman's standpoint." Incidentally he gave me some valuable information in regard to the Fenian organization, a part of which I shall use. I am also indebted to three other persons whom I shall mention in this narrative.

John O'Neill, famous fighter during the American Civil War and commander in chief of the Fenian Army during the Battle of

Ridgeway on June 2nd 1866 is worthy of a short sketch In the year 1862 Colonel Morgan editor of one of the southern newspapers was commissioned by the Provincial Government of the C S A to organize a regiment of mounted troops not less than 600 men for guerilla warfare Officered by the chivalry of the south this daring band of rough riders ravaged the country north of the Mason and Dixon line Sweeping up horses from the many stock farms they put to the torch every factory and mill whose owners failed to put up the price and next day would burn a town 60 miles away Brigadier General Stoneman who commanded one of the finest cavalry brigades in the service was asked to organize from his brigade a composite regiment of cavalry This was done and the 7th Michigan were given the best horses that money could buy and arrangements completed for fresh mounts when needed The orders were to follow night and day this fine brand and destroy his force Colonel John O Neill was given the command How after several historical battles he finally ran the banks of the Ohio River laid the rebel chieftain low and destroyed his command is a matter of history

I am giving you this that you may know the manner of man Colonel Hooker had to meet on the memorable 2nd of June A few years ago I spent a pleasant evening with a gentleman who as reporter for an American daily followed the northern army during the war Said he I knew O Neill and his fine regiment He was a perfect specimen of the dashing dare-devil Irish soldier and his men adored him

At the beginning of the American civil war my twin brothers Charles Sperry Dunn and William Carver Dunn left their home in Pelham and enlisted in the same cavalry brigade Charley fought under O'Neill in the 7th throughout the campaign and until the close of the war I have often wondered what my brother would have said had he known that the man he four long years he had followed in many a hard-fought battle would one day at the head of a hostile army invade his native country His twin brother (they were in the same brigade but different regiments) was killed in Fayetteville N C near the close of the war

When I asked the war correspondent how so intelligent a man could entertain such a wild proposition as an invasion of

Canada, he replied: "Well, the war was over and he was one of a job. The adventure appealed to a man of his temperament; then the large sum of money he was paid no doubt came to handy."

I learned from another reliable source that General O'Neill in discussing the battle some years afterward used the following expression: "I have nothing but praise for the conduct of the enemy at this battle. Up to the time when they made the fatal mistake of forming the square they had driven in all my skirmishers and were steadily advancing on my main position which was well fortified. While I had a number of veterans many of my men had never been in battle and gave me a good deal of trouble. We were to tell the truth just on the point of retiring to the woods near-by when the enemy seeing a few of my men who had horses they had picked up formed a square to prepare for cavalry. Seeing their mistake the officers evidently gave orders to reform. It was my opportunity and just at the psychological moment I gave the order to charge. My men gave the old Union yell and some southern vets gave the Rebel yell. Yi Yi Yi in the well-remembered high key and you know the result. On the retreat the officers repeatedly rallied a part of their troops in face, they gave us a few volleys but all was confusion and we won the day."

In corroboration of what I have just said allow me to quote from "Troublous Times in Canada," page 53, a book written by Capt. John A. MacDonald ex-Capt. 43rd Battalion, Ottawa and Carleton Rifles. I met Capt. MacDonald about ten years ago and spent a very pleasant hour with him. Capt. MacDonald was a veteran of the raids of 1866 and also in 1870.

The unfortunate termination of the Battle of Ridgeway was a great disappointment to Lieut.-Col. Booker's force and he was severely condemned for having given the fatal order which resulted in huddling up his men in a square in an exposed position and finally resulted in a retrograde movement. But under similar circumstances any other officer might have done likewise and to his credit it may be recorded that he did his best to retrieve the consequences of his error and by personal courage in the field endeavored to stop the retreat. He had no staff to assist him and was the only mounted officer on the Canadian side so that he was at a disadvantage. Moreover he had never previously manoeuvred

a brigade, even on parade and to handle one in battle was a trying ordeal to an inexperienced officer who had never before been under fire.

It was a most disastrous occurrence for in another ten minutes of fighting General O'Neill's forces would have been defeated and in full retreat. In fact O'Neill himself admitted this. He complimented the men highly on their courage and steadiness and said he had taken them for regular British troops and could not believe they were merely Canadian volunteers without any previous experience.

I have it on the best of authority that General O'Neill frequently praised the gallantry of the Canadian force on one occasion using the following words: "In my four years of hard fighting I have never seen inexperienced troops fight more gallantly than did those Canadians. It is just what I might have known though. You see I know the breed." He had a large number of Canadians in his famous regiment. As the archives at Washington reveal the fact that 47,436 Canadians enlisted during the war in the armies of the north we can readily believe this.

On arrival of the special train containing the Canadian forces they disembarked and formed up in the following order. The Queen's Own Rifles under command of Major Charles T. Gillmore led the van. No. 5 Company were armed with Spencer repeating rifles and were the advance guard. The York Rifle Company, Capt. Davis next. The 13th Battalion under the command of Major Skinner and the Caledonian Rifles formed the rear guard.

When half the force had passed the house now owned by Elihu Doan (about three-quarters of a mile from the village) the skirmishers sent out by the Fenians opened fire from a thicket of pines about 300 yards east of the ridge road upon which our men were marching. At a sharp command from Col. Booker they deployed in skirmishing order and the fire was returned. The Fenians retreated followed by the Canadian force firing as they advanced. The Fenians joined by other skirmishers who were just north of where the Ridge Road crosses the Garrison Road now opened a galling fire from a sheltered position. Ensign McEachren fell on a broad flat stone at the top of the hill just in front of where Bert Weaver's house now stands and was carried into a log house a few yards

from where he fell He and another soldier was also killed on the hill Chas Ingoldsby was shot through the lung John White of the Highland Company was shot in the arm near the shoulder and Lieut Routh was shot through the lung and legs all very severely wounded and very weak from loss of blood were carried into the log house These men were carried and taken care of by the late Mrs Jacob Danner and her little grand-daughter Georgia Beam

On Monday two days after the battle the wife of Lieut Routh the sister of Chas. Ingoldsby and the wife of John White arrived to care for the wounded Before that the army surgeons assisted by Mrs Danner and her little grand-daughter cared for the wounded There were a few other wounded men in this house but I mention those too badly hurt to be moved

If you should ask why I am so well informed in regard to this part of the narrative I might reply that eight years after the battle I married the little grand daughter If you will call at our house we would be glad to show you a copy of Byron's poems bound in black and gold on the fly leaf of which is inscribed Presented to Miss Georgia Beam as a slight acknowledgment for courteous attentions received at Ridgeway on June 2nd, 1866 W D Dobbie

Mr Dobbie was a veteran of the Crimean War

Sergt Hugh Matheson and Corporal F Lakey who were severely though not seriously wounded than the three above mentioned were removed to St Catharines and died there Sergt Matheson on June 9th and Corp. Lakey on June 13th Mrs Dunn has always claimed that if they had been left in the log house to be taken care of there their lives might have been saved

After about twenty minutes of sharp fighting the Fenians fell back to the main body just north of the house now owned and occupied by Albert Athoe then owned and occupied by the late John Anger father of W E Anger of your city John Arthur purchased this property about ten years after the battle The main body of the Fenian force were just north or rather north-east of the brick house and here the real battle was fought O'Neill had placed fence rails on a rising portion and thus had the advantage of cover while the Canadian force fought in the open Despite this fact more of the enemy were killed than of our force

Six Fenians were buried in one grave in a bush between the John Angel house and the property owned by Wm Teal one in the orchard of the property now owned by Mr Litchenberger and one close to the Ridge Road and directly in front of the property now owned by Fred Fretz. Probably two of these bodies were removed by relatives

Mr Bonner told me he well remembers a big Irishman who came looking for his son who as he put it did not come back Said Mr Bonner We dug up the six then the one in our orchard and I am sorry I cannot say if he found his man as I did not go to the last place with him I have heard however from another source that the old man recognizing his son's shoes on the feet of the man he had to dismember the body made him point out the spot where his body was buried and he found him in the eighth grave.

Of the eight Fenians who were buried after the battle it is safe to say not one of them are resting in their graves today Jacob Stenman who knew the location of every grave told me of a certain American doctor who wished to procure a skeleton and although every place was searched not one could be found He then knew why so many visitors from over the river and which he suspected were medical students had asked to be shown the places of burial

I shall close with an old recitation I have not given since 40 years ago I found I could remember but the first and last verses The rest I have tried to supply

THE FENNIAN FIZZLE

When the coppérheads and rebels in the old United States
Were kicking up a shindy about their darkey pates
There came a wail of sorrow across the briny sea,
That Master O McFennigan wanted Ireland to be free
So Master O McFinnegan and Thady J McFlire
They organized the circles and the centres don't you see
To run the funds that bought the guns and filled the coffers too
To praste the boys to make a mess and raise a hullaballoo
So Paddy O'Day and Terence O Shea and Phelim O McGee
They canvassed all the faithful and raised the cash galore
Forty cents from Pat and Bridget twenty cents from many more
Was the purse that O'Mahoney gathered up among the poor

With a lot of rusty muskets and a thousand old canteens
They set out to cook for Canada a dish of Irish greens
But the redcoats set the table in such a spicy way
That O Finnegan decided to dine some other day
So back across the border helter skelter ran the host
Leaving cook and bottle washer to settle up the cost
And the circles and the centres went to everlasting smash,
While the President and Secretary gobbled up the cash.

Tablet in Memorial Methodist Church Ridgeway

SACRED TO THE MEMORY OF THE RIDGEWAY MARTYRS

Who Fell Defending Their Country in the Fenian Invasion June 1866

Malcolm McEachren Ensign
Queen's Own (Killed)
Hugh Matheson Sgt
Queen's Own (Died of wounds)
Wm Smith
Queen's Own (Killed)
J H Mewburn
Queen's Own (Killed)
Francis LaKey Corp
Queen's Own (Died of wounds)
Mark Defries
Queen's Own (Killed)
Wm Fairbanks
Queen's Own (Killed)

Go strew his ashes to the wind
Whose sword or voice has served mankind,
And is he dead whose glorious mind
Lifts thine on high
To live in hearts we leave behind is not to die

Erected by the citizens in the vicinity of the Battleground

THE FENIAN RAID IN WILLOUGHBY

By Graham Wells

Reminiscences of my boyhood days at the time of the Fenian Raid when I was on the farm in Willoughby my native Township is the subject I have chosen for this brief paper.

The first chapter as I remember in the Fenian Raid—as relates to the invasion—a chapter apparently unknown to many of the older citizens of the Township—and to none probably of the present generation as I have never read it in print.

I remember it was a beautiful morning in June—Friday the 1st day of the month 1866—that the Fenians crossed the Niagara River from Black Rock on the American side to the Canadian side, about one mile below Fort Erie a place known as the Lower Ferry Dock. It was between the hours of three and four o'clock in the morning and they crossed in scows seized at the Buffalo docks by General O'Neill the Fenian commander in charge of the army. I was told the following account by an old resident of the county.

Conlon Bros. (John and Thomas) of Thorold, Ont., (of whom Canada had no more loyal citizens) were extensive dealers in timber and wood in those early days and a large part of their business was transacted with Buffalo merchants. Conlon Bros. were the owners of a number of scows which were used for transporting their products to the American cities.

On this memorable morning one of their scows had just been unloaded at the dock in Buffalo and the captain was making preparations to return home when the boat was seized by General O'Neill (with others) and was used to carry the Fenians across the Niagara River, the steam tug J. H. Doyle was also seized to tow the boats. The tug was owned in Buffalo and was afterwards bought by the late Capt. James Bampton and brought to Welland and rebuilt, and the name changed to the "*Varna*."

Some years later John Cowlan was a candidate in Welland County for the Dominion House of Commons and the argument was used against him in the campaign (not from the public platform but by unscrupulous enemies) that he had loaned the screw to General O Neill for that purpose

As I have stated, it was a beautiful June morning that I was wending my way to school at No 6 little knowing of the thrills that were awaiting me at the little country school with its peaceful surroundings which was located about one and a quarter miles from my home When nearing the school a number of the children—who had heard the news— came running to meet me Some of the older ones with sad faces (who understood the situation) and others with smiles because the teacher had dismissed them and thinking no doubt about the extra holiday We all went back to the school house where the teacher dismissed us My imagination is that I beat all world's records as a sprinter for that mile and a quarter home to spread the news that the Fenians were over

Father and mother and many of the neighbors had received the terrible news—but father did not appear to get excited My two older brothers had mounted their horses and went on a scouring expedition to the direction of New Germany

Many thrifty farmers in the neighborhood carried large sums of money in their homes—as there was not the banking facilities we have today—banks were few and far between But I had heard father say that T C. Street was the banker for most of the farmers around him, as he held the mortgage on their farms

Perhaps had it not been for the Fenian scare I would never have known how much money my father had at that time but well mother, I was taken into his confidence and the money was brought forth to be planted We lived in a log house with no cellar so we could not plant the money in the cellar There was a large rawhouse and there the money was interred to about two feet of earth in the presence of father mother and myself There was no paper money to bury all gold and silver and was placed in two glass fruit jars

Father dealt quite extensively in cattle, sheep and horses and his buyers in those early days were nearly all Americans. I have

seen them come in the house to pay father for the stock and they would have a long leather bag with a padlock at one end which they would open up and pour the gold and silver out on the dining room table—and the table was quite large as there were ten in the family

By the time the money was secreted one of my brothers had returned with the news that the Fenians were taking all the horses for their cavalry and scouting

The next thing was to hide the horses which was no easy matter There was a small creek that ran through father's farm and it was divided in one place, forming quite an island, which was thickly covered with trees and there the horses were carrolled Father did not bother with the cattle or sheep

By the time we returned from caring for the horses we saw many loads pass by containing furniture bedding and other household goods which were making their way into the interior—no doubt many of them to relatives One of our neighbors who had moved from near New Germany was besieged with his kin till Sunday when the excitement blew over and all returned to their homes

On Sunday the day after the battle my father took me to see the soldiers encamped at New Germany

It was a grand sight to see and one that has never been erased from my memory

MY RECOLLECTIONS OF THE FENIAN RAID

By M. G. Sherk

At the time of the Fenian Raid of 1866, we were living in Stevensville a small village about four miles from Ridgeway and a little the same distance from the locality of Limestone Ridge, where the battle occurred. My father, Rev. A. B. Sherk a minister of the United Brethren Church, the night the marauding army led by General O'Neill crossed the Niagara River into Canada, had been attending an evening meeting in the U.B. Church on the Garrison Road, three miles from the village of Fort Erie. He spent the night at the house of John Hershey, one of his church members, a well-to-do farmer and a man prominent in municipal affairs in the Township of Bertie. Early the following morning he was sitting chatting with his host when a neighbor came in and informed Mr. Hershey with "John did you hear the news? The Fenians came over last night, eight hundred strong and fifteen hundred more are ready to follow." My father's first thought was of his family, so he at once set out for home. My mother alone with her children was awakened at early dawn by the noise made by numerous vehicles passing through the village and on going to the front door of our house that stood near the roadway saw women and children, some of them partly dressed, huddled in wagons along with a few articles of furniture, bedding and provisions, on their way to the big marsh a few miles back in Humberstone Township. One of the women wringing her hands frantically, called out to my mother, "The Fenians are coming. They are only a few miles behind. They are killing men, women and children as they go." I remember as a boy, not quite five years of age, my mother taking me across the bridge over the creek to the house of Peter Hendershot, the local merchant. Mr. Hendershot being away at the time, Mrs. Hendershot was having a wagon

loaded with a few things preparatory to fleeing, but as my mother expressed no great concern, she decided to give up going. Just then my father was seen coming down the hill in his gig and I followed my mother out to the middle of the cross-roads to meet him. He was anxious to follow the fugitives farther into the country. My mother objected but proposed going down to her father's (Capt. M. D. Gonder) one mile below Black Creek post office, on the Niagara River Road. This proposal did not suit my father who thought there would be more danger there. My mother then said she would be willing to go to her uncle's, Joshua Fares, a few miles into Crowland Township.

My father gathered a few things together and placed them in his gig and we started, but when we got to our destination we found my mother's uncle's family with their wagon loaded with a few necessaries, ready to go farther away from the border. On my mother laughing at her Aunt Sally Ann for being so frightened, her aunt said to her: "Well, Rebekah, if you are willing to stay we will."

I remember going out into the old-fashioned garden at the back of the house the morning of the battle and hearing the noise of the engagement on Limestone Ridge. My father and mother's uncle went together to view the battle-ground shortly after the battle and before the bodies of the dead Fenians had been taken from the field. He noticed that the buttons had been cut off their tunics. He thought it had been done by their comrades, but it was more than likely done by visitors who carried them away as souvenirs.

After we had left our home at Stevensville, one of my mother's brothers (H. J. Gonder) arrived there, sent on horseback by my grandfather to see how things fared with us, but as we were not found, he, accompanied by several men on horseback, one of them being J. H. Allen, for many years postmaster and general store-keeper at Black Creek, rode along the river to the Fenian camp-ground to have a look through field glasses and telescopes at the Fenians, when a Fenian officer rode up to them and took them prisoners. They were kept in camp until twelve o'clock that night and then released. Their horses were not given to them but were

found a few days afterwards running loose on the roads after the Fenians had skedaddled, somewhat scarred by the usage given them.

The horse belonging to my grandfather that my uncle rode was called "Fenian" ever after.

Some of our soldiers came from different parts of the country by way of the Falls, where they detrained and then took the road by way of Chippawa to New Germany and Stevensville and thence to Fort Erie to join the forces already assembled. My father being on the road at the time was stopped by our officers in command to enquire the way. Some of the poor young soldiers, many of them students from Toronto University, who were so hurriedly called out from Toronto and other places, were so fatigued by forced marching and used up for want of sleep and with hunger, that the farmers' families along the river road came out and served them with milk and other refreshments as they marched past.

Although the engagement at Limestone Ridge would be considered a trifling affair, it showed the necessity of being prepared and of a proper organization of the militia. My maternal grandfather, M. D. Gonder, who had served as acting-captain after the death of Captain Usher, who was assassinated by MacKenzie's men who came from Navy Island in the Rebellion of 1837, and who was afterwards captain in the militia for years, made the remark that our militia was very badly handled and that it should have been an easy job to have rounded up the Fenian mob.

The rank and file of the Fenian army were made up of very ignorant Irish, many of them believing that Canada was a wilderness and that it would be an easy matter to take possession of it and then parcel the land out among themselves. The officers who had been living in luxury from the funds that had been furnished the society by sympathizing Irish, many of them hard working servant girls, had to make some sort of a raid to pacify their followers even if they knew it would result in failure.

It is said that in the remote Irish settlements of Canada there were parties who were in sympathy with the Fenian movement and who expected to acquire the property of their neighbors if the invasion was a success. In York County in the immediate vicinity of the then Toronto of those days there were known to be

at least two Fenian head-centres and much secrecy was observed in the movements of these people. Quantities of jakes were said to be stored in the houses of members of the organization. Of this I am informed by a then Toronto citizen who has a distinct recollection of the Fenian Raid.

On the Sunday following the day of the battle services in some of the country churches of the frontier were omitted there being no congregations to greet the ministers the people being in a condition of panic not thinking of worship.

I heard my father say that after the Fenians had embarked at Fort Erie, in a large scow for their return to U. S. soil they remained for some time midway in the stream not being allowed to land on the New York State side of the river. Uncle Sam's government at Washington after having allowed the affront to the British flag seeing the predicament they might be placed in had at the meantime got busy and was puzzled what to do not knowing whether to let the Fenians land on U. S. soil or to leave them to the mercy of the Canadians. Some of our officers who arrived on the scene after the Fenians had departed were for putting a shot into the boat and sinking the ruffians bag and baggage but on deliberation it was considered how so to do so as the act might lead to international complications it being a question whether the boat was in U. S. or Canadian waters. We think, however the U. S. would have had no reason to complain for they knew beforehand that the Fenians intended to invade Canada having allowed them to arm and equip themselves as well as to drill on their territory and to parade in the streets of Buffalo and Chicago. The people of the Northern States at that time we know had no great love for Britain on account of the sympathy shown in their Civil War to the Confederate States by the British people. We believe that the cold animosity has been forgotten and that the U. S. and Great Britain are now on lasting fraternal terms.

Several of the farmers in the vicinity of Black Creek on the Niagara River who had valuable horses it is said swam them across the river three-quarters of a mile wide at this point rather than run the risk of their falling into the hands of the Fenians and it is said some of them moved part of their household effects over as well. My grandfather gave orders to one of my uncles

to gather all the horses on the place together and take them to another farm he had several miles back in the country. My uncle was asked all sorts of questions by the wondering people he met who had not heard of the invasion.

Another of my uncles found in the woods in the vicinity of where the Fenians had been encamped leaning against a tree a Fenian rifle with a knapsack containing among other things a Roman Catholic prayer book on the fly-leaf of which was written in pencil "John O'Neill his prayer book. Holy mother for me pray and take on my dying day my soul to Heaven."

Until I was seven or eight years of age when living one hundred miles from the Falls on our annual visit to grandfather's on the Niagara River when passing by a bush along the road, imagination would picture soldiers in rifle-green as ready to pop out from behind the trees my young mind having been so vividly impressed by what I had seen and heard at the time of the Fenian Raid.

One of the patriotic songs sung at that time a parody on "Tramp Tramp Tramp the boys are Marching" contained these verses (the only two I remember):

In a carriage by my side
Sits the darling of my pride
And our happy children round us are at play
But the news spreads o'er the land,
That the Fenians are at hand
And our country's call us cheerfully obey

Chorus

Shout, shout, shout ye loyal Britons
Cheer up lest the Fenians come
For beneath the Union Jack
We will drive the Fenians back,
And we'll fight for our beloved Canadian home

Old Mahoney needs some cash
And he contemplates a dash
With his troops upon our soil to raid
But he'll find to his dismay
That the thing will never pay
And he'll wish himself off Erin's soil again

In 1870 there was another Fenian scare and an attempt at invasion at Eccles Hill Quebec when the 3rd Victoria Rifles of Montreal drove the invaders back over the U.S.A. border I remember that year on our annual visit to grandfather's during the summer holidays dragoons on horseback were constantly patrolling the river-road from the Falls to Fort Erie watching the frontier One day I was leading one of my grandfather's horses down to the watering place at the river, when I saw a gaining Dragoon put his hand to his belt as I thought to get his pistol to shoot Unconsciously I let go the halter-shank by which I was leading the horse and hurried to the house My grandfather afterwards often laughed and joked me for letting "Old Boney" go down the road after the soldier

The foregoing childhood reminiscences only touch briefly on the history of the Fenian Raid that was only we may say the invasion of a day but they show the feeling that it created among the people in the immediate locality and in Canada and the patriotic spirit that was roused by the occurrence all over Canada

PERSONAL EXPERIENCES IN THE FENIAN RAID

By Albert W Reavley, Gunner W C F B

On the 31st of May the news was flashed over the wires that a large body of Fenians was assembling at Buffalo for the purpose, it was supposed, of crossing into Canada. Next day events proved the report true. A body of men variously estimated from 2,000 to 5,000 landed at Fort Erie. They made a demand for provisions and received a supply from the village council. The Fenians brought many more arms than they needed. At Frenchman's Creek where they encamped the first night they burned the extra arms. Early in the day they sent a party to burn Saueweln's Bridge. This you will all know is the G.T.R. bridge near Mr. M. Sexsmith's.

Meanwhile the volunteers were called out and rushed to the frontier and notwithstanding the fact that several regiments of regulars and two batteries of Royal Artillery were stationed at Hamilton and Toronto the volunteers were the first on the ground where the attack was made.

The Queen's Own came by train from Toronto to Port Dalhousie and by the G.T.R. reached Port Colborne about 10 a.m. On their way they picked up at Port Robinson one division of the Welland Canal Field Battery. Later in the day the 13th Battalion of Hamilton and the York and Caledonia Rifles arrived. The total strength of these corps was about 1,000 and the presence of so many caused a famine for two days.

On Friday the Welland Canal Field Battery furnished a guard of twenty-one men to protect the construction party which repaired the Sauerwein Bridge. This was a work of some hours and the party did not get back to Port Colborne till midnight. At Port Colborne the three officers who were highest in command were Col. Booker, 13th Battalion; Col. Dennis, Queen's Own; and Capt. Akers, Royal Engineers.

(a) Those officers received orders to patrol the Niagara River with the tug *Robb* and prevent the retreat of the force already in Canada, and keep reinforcements from crossing. The Welland Battery, Capt. King, and the Dunnville Naval Brigade were assigned the task. It may be noted that Capt. McCallum of the Naval Brigade was owner of the *Robb*. They embarked at 4.30 a.m. on Saturday and with Col. Dennis and Capt. Akers with them started for Fort Erie.

(b) Col. Booker in command of the Queen's Own, the 13th and the York and Caledonia Rifles were to go by train to Ridgeway and march across to Stevensville and effect a junction with Col. Peacocke who had orders to march from Chippawa to New Germany. Peacocke's force was made up of H.M. 16th Regiment of Infantry, a battery of Royal Artillery with guns and the 19th Battalion St. Catharines and Governor-General's Bodyguard. A third column composed of H.M. 47th Regiment, a battery of Royal Artillery and some volunteers was to move up the Niagara River and there it was hoped the enemy would be hemmed in and finally disposed of.

On the night of June 1st an official of the G.T.R. who had been at Fort Erie arrived at Port Colborne and reported that the Fenians were all drunk at Frenchman's Creek, that they were quarrelling and fighting with each other, and that fifty good men would put them to flight. This report was true in all respects for it was stated that a boy was killed in a drunken fight. This report had one very disastrous effect. It led the volunteers to despise the enemy so as to underrate their fighting power. It also fired the officers with a desire to win the honor of beating the enemy before the regulars could get a hand in, and is in some degree accountable for Col. Booker's rash haste the following day and the failure to carry out to the letter the orders received.

We left the Fenians at Frenchman's Creek, near which they passed the first night. They marched along the line between Bertie and Willoughby, heading it would seem for Welland with the object of destroying the canal or rendering it useless. But before they got near to New Germany, they evidently learned the part that Booker's force was to take for Col. O'Neill changed his line of march and made for the Ridge Road, upon reaching which

he followed it up to Bertie road where Athoe now lives Here they halted and made preparations to receive Booker They took the rails from the fence on the north side of the Bertie road and laid them slanting down towards the south the upper ends resting on the top of the fence south of the road and the lower ends on the ground Thus made an effective barricade against the bullets of the Queen's Own Here they waited for Booker

None of the higher officers of the Fenians were known to have been in Canada Neither General Sweeney nor O Mahoney were reported present The command devolved on Col O Neill who had made himself famous by the defeat and capture of the force of Morgan the confederate guerilla Col Bailey of the United States army was present and took charge of a part of the fighting Line On the march the Fenians had secured a few horses on which their officers were mounted It was the sight of those which caused afterwards the disastrous but false alarm of cavalry

On the morning of the second of June Col Booker with his command took train at Fort Colborne and detrained at Bridge way where he learned that the Fenians were waiting for him at the Bertie road Sam Johnson offered to lead him to the enemy The whole force lost no time in moving down the Ridge road acting as most thought very rashly and no doubt expecting an easy victory Before the Canadians reached the Garrison Road they found themselves in touch with the Fenians Shots were fired by the Fenian pickets The Queen's Own deployed on the Garrison Road and the line of skirmishers advanced and gradually drove back the advance posts of the enemy A little before 9 o clock Detective Armstrong galloped up with a message from Col Peacocke stating that he (Peacocke) could not move as rapidly as he had expected and that Booker should delay his advance and move slowly This order was nearly an hour too late to prevent the action desired In that hour several casualties had occurred McEachren McKenzie and Tempest had fallen and a number had been wounded The main body of Fenians had been driven back from the barricade on the Bertie road Many had given up the fight and were on their way to Buffalo O Neill a man alone behaved as soldiers They were retiring in good order feeling that they were losing the honors gained in the defeat of Morgan But

just then something happened which turned the scale in their favour. The ammunition of the firing line was exhausted. It was necessary to replenish it. It was intended to have the 13th relieve the Queen's Own. The York Rifles and one company were moved to the front. There was some delay and then a few mounted Fenians appeared on the ridge north of the Berne Road. In some unaccountable way an alarm prepare for cavalry was raised. The greater part of the force formed in two squares on the ridge road a little north of Elisha Teal's house. One man was killed in the square and it was very fortunate that the nature of the ground and the numerous trees prevented the enemy from pouring in a destructive fire. After this there was much confusion and many were panic-stricken. A fact which need not cause great surprise when we consider the large number of boys—you could not call them men—who made up too large a part of the force. This was especially true of the 13th. In spite of all efforts of the officers, there seemed to be no possibility of getting all to make a fresh attack. A majority were willing to renew the fight but twenty per cent. or less made off and the majority seemed unwilling to make further resistance unless all did so. Thus the action of the minority decided the action of the whole. The Queen's Own the York and Caledonian Rifles retired steadily exchanging shots with the pursuing Fenians. The writer remembers a private of the thirteenth who was wounded in the neck and who was being helped along by two comrades yet the wounded man wished to stop the fire back at the enemy who were getting dangerously near. The Fenians followed the retreating force quite to Ridgeway and after visiting the hotel marched back to the Garrison Road and after a time started for Fort Erie where they arrived about six o'clock.

The volunteers marched in straggling parties along the main road towards Fort Colborne. Not far from Sherkston they were met by a train composed of flat cars which could not take us all. The train went to Fort Colborne and made a second trip for the rest.

We now return to the *Robb* which had been sent to Fort Erie. Col. Dennis and Capt. Akers took command. They landed at Fort Erie disembarked most of the hundred men and marched down the river. They took many prisoners sixty five in all, those being

camp followers who were heading for the American side. Some of those carried knives and revolvers and were of course disarmed. On the whole these were the worst looking lot of ragga muffins to be seen outside of a penitentiary. These all marched as far as Black Creek where all went aboard the *Robb*. The *Robb* with her prisoners arrived at Fort Erie a little before six o'clock. Col. Dennis ordered his men on shore at the lower ferry dock. He was preparing to billet his men in the village for they had not had a meal since morning. A few had been fortunate in getting a drink of milk or a small lunch at farmers' houses during the day. At this time Capt. Palmer rode in on horseback to warn Col. Dennis of the approach of the Fenians. He stated that they would be there in twenty minutes.

Capt. King proposed that they should pile a barricade of cord wood on the *Robb* then go aboard and keep the rig in the river and fight behind the cordwood. This suggestion was not acted on and in a short time the Fenians appeared along the top of the ridge that overlooks the village.

The Naval Brigade faced southward on River Street, one block south of the lower ferry wharf, where the Robb was moored. They were near the corner at which stood Russell's machine shop. The Willard Battery was posted a few yards from the Naval Brigade facing to the west. Here these two companies were placed and allowed to stand during nothing to hurt the enemy and nothing to protect themselves. The Fenians extended along the ridge some of them partly concealed in an excavated road. Still Col. Dennis gave no word of command but looking down his nose left his men to become targets for the enemy. A mounted Fenian officer waved a white handkerchief inviting the little party to surrender. And yet there was no move or word of command from either Dennis or Akers.

Then the suspense was ended by the Fenians opening fire. At this stage it was clear that Dennis would not do anything to give his men a fair chance to fight nor help them to escape from so unequal a foe. Instructor McCracken of the Royal Artillery said to the men of the Welland Battery. "Boys, you had better take care of yourselves." This suggestion was at once acted on by both the Naval Brigade and the Battery and amid a hail of bullets the

two companies made down street towards the *Robb*. But the Captain of the tug, finding his prisoners getting troublesome, and fearing that the tug might be captured, cast off her lines and let the tug drift with the current. Some of the battery followed down the river bank, made good their escape. Sixteen of these besides Capt. McCallum were taken aboard the *Robb* and started for Port Colborne. As they passed up stream past Fort Erie they received a heavy fire from the Fenians, the man at the wheel having a very narrow escape.

But to return to those on shore, some who were too late on the dock to board the *Robb* jumped into the river and climbed upon the timbers beneath the dock and remained there all night. Others went into the Lewis house and from the upper windows fired upon the enemy. Col. Bailey, U.S.A., and his horse were victims of these. Soon the Lewis house was closely beset and the walls were riddled with bullets, which caused an intolerable dust from the breaking of the plaster. The Fenians ordered the occupants of the house to surrender or they would burn the house. This demand was complied with and about thirty laid down their arms.

In this short fight there was some hot work. Before the evacuation of the Lewis house, Capt. McCallum and others of his company came out of the house. A Fenian pointed his rifle at the Captain, but one Thewlis, who stood beside the Captain, pushed his bayonet through the Fenian's neck, and saved his Captain's life. One member of the Welland Battery, who was a good shot, took shelter behind the pile of cordwood on the wharf and from this place he fired into the crowd of Fenians as they came down the street. A little later, when a prisoner, he was marched past the place at which he had been firing and noticed five or six killed and disabled on the ground.

It seems a wonderful circumstance, that with a force of ten Fenians to one volunteer, and at a distance of little more than two hundred yards, there was not a single fatality on the side of the volunteers, five wounded was the total. Of these Captain King, John Bradley and Fergus Scholfield had legs amputated, the others having flesh wounds. During the rush for shelter, any hiding place whatever was utilized, Chicken-coops, pig-sties, etc. Col. Dennis found his way to Dr. Kempson's ash-house, from which he

reached the kitchen, where he found sympathy. A kind-hearted domestic was willing to part with some of her outer apparel in a case of such dire necessity. But the Colonel's whiskers did not harmonize with the proffered garb. What was to be done? Must such a gallant pair of whiskers be sacrificed? Even so; a razor was loaned and with the disguise effected, the Colonel made his escape under cover of the darkness and, as they say, "saved his bacon."

A number of King's men had gone into the Lewis house and poured an effectual fire upon the Fenians. Among their victims was Col. Bailey, already mentioned, of the U.S. army, who lived till the following morning. His horse was shot from under him at the same moment that he was struck. The Fenians had surrounded the house and riddled it with bullets. The Fenians then ordered the party in the house to surrender or they would set fire to the house and shoot every man as he came out. It was useless to fight so great odds and all, 30 in number, laid down their arms. In this action the loss of the Fenians was estimated at ten or more killed.

Those taken as prisoners by the Fenians were marched up to the old fort where they received a slice of raw pork and some soda biscuits for supper.

At about 11 p.m., Col. O'Neill collected his men and made an appeal for followers, as if he had in hand some desperate undertaking. He and his braves were away for a period of two hours. It is the firm conviction of many that he intended to surprise Peacocke's camp but finding the latter's guards and pickets wide awake he abandoned the attempt. This belief finds corroboration in Col. Denison's narrative which states that the outposts of Peacocke's force heard those sounds, familiar to experienced ears, which indicate the proximity of a large force. On O'Neill's return to his prisoners he had them drawn up in a line as if he intended to have them shot. Some of the prisoners thought they were to be shot and told O'Neill that the *Robb* had a large number of Fenians—twice as many as he (O'Neill) had of Canadians and that if anything were done by O'Neill to his prisoners, not a Fenian prisoner would be allowed to live. O'Neill's demeanor at once changed and he made preparations to embark.

About 1.30 a.m., a tug and scow came from Buffalo and took on board the militant part of the invaders. It would seem that

the Americans had kept a close watch on all that was being done for the scow had hardly crossed the boundary when a shot from a swivel gun on the U S warship *Michigan* compelled the tug to stop. The scow with its cargo of adventurers was taken in tow by the *Michigan* awaiting for some days orders from Washington I believe that the greater part of Fenians made their escape from the scow, while the authorities at Washington were deliberating on the course to pursue.

The prisoners taken by the Welland Battery and Naval Brigade were taken to Toronto and held for it al as the Fall courts four months later During this period of waiting a wonderful transformation to the appearance of these men took place When captured all were sunburnt dust covered unshaven and unkempt Nearly all wore ragged clothes while most conspicuous for the accumulation of dirt were shirts which showed no sign of ever having been in a wash tub All this was changed by prison discipline and the sanitary conditions enforced thereby There was none of the squalor so noticeable when captured On the whole with the loss of tan and the addition of prison uniform identification was impossible in the majority of cases Those making the arrests could not swear where they had seen them As a result nearly all were set free, less than a dozen receiving sentence of life imprisonment

In 1872 the tax then at Kingston were set free much to the chagrin of the volunteers To add to the annoyance of the volunteers each Fenian received free transportation to Niagara Falls and in addition a five dollar bill with which to celebrate his liberty and make merry with his friends

The writer was a member of the Welland Battery but was present at Lime Ridge with two others of the same corps and having been a spectator during the early part of the action and a participant when the Caledonian Rifles went to the front he can speak positively as to what actually took place on the field The facts relating to the action at Fort Erie were gathered from the writer's father and from officers and comrades who were present

I have spoken of the annoyance felt by the volunteers on account of the leniency shown to the Fenians who were made prisoners A much stronger word than annoyance would be needed

to express the feelings of volunteers who had been in active service when the government of old Canada gave a five dollar bill to each Fenian set free in 1872. This unwarranted liberality was the less justifiable for the reason that the volunteers never received a cent more than their scanty pay thirty-five cents per day. And the privates who were wounded received almost nothing. John Bradley whose leg was amputated close to the body and who was completely disabled for life received something like thirty five cents a day. Fergus Schultfield who had his leg amputated below the knee received twenty cents per day. We are pleased to note that a more worthy appreciation exists today.

Lessons of the Raid

The Fenian Raid was a great shock to the people of Canada yet it was not without its useful lessons.

It proved that Canada, however well-behaved, was liable to attack, thus demonstrating the need of defence and what was still more important the need of unity.

For two years the best men of Canada including the leaders of both political parties had tried to unite to bring harmony out of chaos. We had had a "deadlock" in parliament. Our representatives had not been able to pass any legislation. Various attempts to form cabinets had been made by different leaders without success. Stability was entirely lacking the Brown Dorion government lasted only three days.

Following two conventions of the Fathers of Confederation the raid gave a decisive impulse to the union movement.

Our leaders realized that party bickerings must cease before we could work out our destiny that only through unity harmony and co-operation could the foundation be laid. True, we have united the provinces with a girdle of steel to further our commercial interests, yet much more is needed to strengthen our sense of national and Imperial unity.

RECOLLECTIONS OF THE FENIAN RAID

WRITTEN BY N. BREWSTER, M.D., IN 1911

As the general history of the Fenian invasion is well known, I will confine myself to what came under my own observation.

In the well-remembered morning of the 2nd of June, the inhabitants of the village were attracted by the sound of whistling from a train from the west, the first in two days, and we soon learned the troops were here. We had earlier learned by courier of the approach of the Fenians from the north.

Profiting by my three years' experience in the great Civil War in the U.S.A., where I was often in battle, I soon learned our soldiers had nothing to eat since the day before, and I went along their line of march and asked our people to bring out for them all the cooked food on hand.

They responded liberally, and so many of the soldiers got at least a lunch.

I never learned who was in fault, but surely some one blundered, that men were sent into battle without food in this part of the country.

About an hour after the troops marched away, the sounds of battle so familiar to my ears, were heard, and I again went among the people, and told them there was fighting going on down there, and there would soon be wounded to care for, and advised them how to prepare for their reception.

I then gathered up such of my surgeon's outfit as I had left, namely instruments, bandages, adhesive plaster, chloroform, a canteen full of whiskey, another of water, and started for the front. Just at the bend of the road to the north of the village I met such a mixed and confused mass as I have never seen elsewhere before or since. Soldiers and citizens, men, women and

children, on foot and in all varieties of vehicles, with horses, cattle, sheep and pigs, all mingled together, and all hurrying along the road south. It brought to my mind Russel's description of Bull Run.

I saw two soldiers without guns running and close behind them an officer with revolver in hand crying halt and firing in the air occasionally but running as fast as he could and close behind him more soldiers running.

Soon after I saw that some of our men had taken possession of the buildings on the corners at the first cross road north of the village, then owned by old Mr. Joseph Dunning, Uncle Joe as he was called, and were gallantly trying to hold the enemy in check. And how I wished there were even a few veterans tried to battle among them to hold them steady, but it was not long until I saw wavering among them, and soon they broke and continued their retreat.

Being now in the line of fire I hastened to the left and made a circuit around the contending forces to the rear, and while in the fields I heard shouting and firing, but paid no attention until I heard bullets whistling over my head, the other being the ordinary noises in battle. Then I observed they (the Fenians) were hailing and trying to halt me, and call me in. I was soon among them and a prisoner. I was surprised to see that the only some among them in any kind of uniform wore that of the U. S. army. A Captain among them wore the full fatigue dress of a trunk, who being asked why he had that on over here, he said he had not taken it off since the war. I told him it was time he did, as this was no place for it, and that I thought too highly of that uniform to see it worn in such a cause as I had myself worn it for three years.

The Canadian soldiers retired through the village, and so on to Port Colborne and we saw them no more.

The Fenians took possession of the village, and anything else they wanted, posted their advanced picket at the cross-roads, on the hill west, then they settled down for rest and food, in some cases cooking and eating their dinners in private houses, even setting the table in my own house. They took very little food beside food, and did practically no damage to private property.

After waiting about three hours for orders or news they retreated toward Fort Erie, and we saw them no more.

The Captain I have mentioned on learning my profession and object sent me on to the field saying I was needed there and that I should call on any Fenians I met for assistance and I did so freely I scoured the fields roads and buildings, gathering in the wounded all of whom I cared for taking their names rank company and regiment on my list recording all the friend and foe and at the conclusion had twenty-six names on the list which I regret to say is lost

Of these two Canadians were dead, and there were four Fenians dead whose names I could not learn

One of the Canadians died from heat and exhaustion in my presence being not wounded a murder of the University of Toronto and a member of the University Rifles—brought in from the field while still living

Of the five houses used as shelters for the wounded, but two remain namely Mr Athne s and Mr Pierce s One stood where Mr Benjamin Weaver now lives one at Mr Beer s and one the Smuggler s Home hotel has not been replaced

One of our wounded officers, that king he must die gave me his sword and belt, gold watch rings etc and exacted a promise from me that I should visit his wife be the bearer of certain fare well messages giving her all but the sword and belt which I was to keep

I afterward had the pleasure of returning all to himself in his wife s presence except the messages

A passing Fenian saw the sword and tried to take it from me but I secured the assistance of a guard left on duty by then commander, who drove off the marauder and I concealed the sword

Our troops marched down the Ridge Road to the Smuggler s Home on the corner formed by the Ridge crossing the Garrison Road where they deployed as to line reaching to and into the bush on the east and a few rods below the hill on the west and advanced across the fields and along the road to the north They soon met the fire of the advanced Fenian picket hidden in a clump of bushes in mid field which has only lately been cut down I was told by our men that they were driving the Fenians back to their main line and doing well cheering as they went suggestive of success until the fatal blunder that ordered them into squares to rests

cavalry which they obeyed but instead of cavalry they found a line of veteran infantry trained to service in many hard fought battles in the American War facing them who were quick to see and profit by the false move. They tried to get again into line, but being pressed fell into disorder then broke and began their retreat. The extreme right continued to advance and occupied a part of the enemy's breast works and in their retreat a number of them being cut off from the main body continued easterly until they reached the lake near Windmill Point.

I was assured by men living along the line of the Fenian march from Black Creek that there were but two mounted men in the Fenian ranks and I could not but reflect upon the fitness for command of a man whose excited imagination could multiply two mounted men into a troop of cavalry. I was assured by many of our men officers as well as privates that all was going well, and they were sanguine of success until that stupid order to meet cavalry which they saw did not exist, threw a pall on their spirits and I have often spoken with one of the participants whose who did not believe that was the cause of the disaster.

As to the number engaged I estimated the Fenians a little more numerous than the Canadians and a very large percentage of them were seasoned veterans used to war and battle while ours were in a man new recruits not one of them had ever before heard the whistle of hostile bullets or as the phrase is smelt powder.

The phrase shot in the back has a tinge of disgrace in it, but not always justly so for on this occasion Ensign McEachren of the Queen's Own observing that his men while crossing the fence and fields were in disorder stepped boldly out in front and turning and facing the men who were trying to get them in line again when he fell. He personally wounded by a ball in the back and which passing within an inch of his heart came out in front. He recovered and was living a few years ago and I have seen no report of his death.

I have never seen the Fenian lost reported, but I have found of them dead and learned from people living on those roads that at least six wagons carrying dead and wounded were seen going toward Fort Erie, but I have never heard the number estimated

Some of our less seriously wounded were helped in the retreat by comrades and given rides by our fleeing citizens, and I did not see them, but they were all properly reported

The Fenian line was formed along the cross road by Athoe's, and they took the rails from the north fence and placed them on end on the ground and the other resting on the south fence and so constructed a very fair breast work and defence

A home guard was formed here in the afternoon of the day the Fenians came over, with E Morris Esquire now of Fonthill as Captain, and mounted men armed patrolled all roads north and east all night and moved west with the retreating troops but returned and again patrolled the roads east with a good degree of efficiency a fact brought home forcibly to myself as they twice halted me on my rounds

A good joke was circulated about them and their retreat to the effect that they established their headquarters in the marsh west of the Welland Canal to assist in its defence, doubtless they would have given a good account of themselves

Very few of the inhabitants of the village remained in their houses but went with the crowd and so gave the Fenians full liberty but they took very little from the houses, chiefly handkerchiefs stockings and little items to keep as souvenirs From mine what I most highly prized was the gold lace and insignia of rank from my uniform which I was keeping as a souvenir Probably someone has it for that purpose now

An object of interest to the many visitors to the battlefield was for many years the marks of the bullets on the brick walls of the Athoe house

A ROMANCE OF THE RAID

By George Wells

Every war has its stories of love and romance and the Fenian invasion on the Niagara Frontier in 1866 was no exception to the rule. This story as published below, was discovered while rummaging through some old files of the *Welland Tribune* and is dated May 2nd 1867. There is no signature to the story with the exception of the word Press as if copied from another newspaper.

A singular case of elopement occurred in the Township of Bertie about a week ago which affords another instance of the proverbial blindness of love and the hasty ill-advised actions which those influenced by the tender passion of love will at times be persuaded to adopt. In order to fully understand the affair we shall be obliged to refer to the events of the Fenian Raid of last June in which the hero of the present narrative took a conspicuous part.

Patrick J. O'Reilly of Buffalo was a Fenian. He was a discharged American soldier, a saddler by trade and an active and not bad looking young fellow of twenty-four years, or thereabouts. Either from mistaken patriotism love of plunder recklessness or as Artemus Ward has it "pure cussedness" P. J. joined the Fenian invaders and on account of his military experience obtained a lieutenancy. He participated in the battle of Ridgeway, and at the close of the fight received part of his deserts in the shape of a ball in the side.

Abandoned by his pusillanimous comrades he followed the retreating Fenians for some distance but at last, faint from loss of blood, had just sufficient strength remaining to crawl to the door of a farm house about four miles from the Niagara River, and begged to be cared for and concealed from the red coats. The men

of the family were away from home at the time, looking after some horses which had been stolen by the Fenians—in fact one of the daughters was the only person left about the place. Taking pity upon the condition of the wounded man, and knowing that if her father and brothers found him in the house he would at once be handed over to the military authorities, she concealed him in an old disused barn at some distance from the house, assisted him to dress his wounds, and supplied him with food for about a week and until he was able to travel.

By her guidance, O'Reilly then succeeded after much difficulty in outwitting the vigilance of the sentries and escaping across the river, probably considerably benefitted by his Canadian experience. While the foolish girl had thus, from a mistaken idea of sympathy, been conniving at the escape of a criminal worthy of severe punishment, and, unluckily for her, her compassion changed to love—probably sincere, though sadly misplaced.

After the departure of O'Reilly, she settled into a deep melancholy, and her friends predicted an early death from consumption. Nothing was heard of the escaped Fenian until some time later, when an individual of much the same description—apparently a pedler—called at the farm house in the evening and asked for a night's lodging. His request was readily granted and he accordingly made arrangements for passing the night there, retiring early.

When the morning dawned, however, the pedler was gone—and the young lady also. The latter had been observed to be much affected and unable to conceal her agitation on seeing the stranger the previous evening. A couple answering their description were seen driving rapidly towards the Suspension Bridge on the morning they eloped, and a Buffalo paper, a day or two afterwards, contained the announcement of their marriage in one of the Catholic churches in that city.

The parents and friends of the girl are, of course, much grieved at the course she has pursued, and the unfortunate alliance she has formed. For this reason we suppress all names but that of the bridegroom.

We only hope the silly girl will never have cause bitterly to repent the match she has made.

SAM JOHNSTON SMUGGLER, SOLDIER AND BEARER OF NEWS

By Louis Blake Duff

Mr M O Hammond who is the able Bystander at the Office Window of the Toronto Globe lighted a fuse a year ago that was to illumine a curious and interesting incident of the Fenian Raid and to call up from well-nigh forgotten memories a most interesting and picturesque character long since passed from the local scene

Mr Hammond while making one of those excursions of his in the wake of a camera had heard a legend that one Sam Johnston had galloped up on that June morning bringing to Col Booker and the defeating soldiers at Ridgeway news of the approach of the Fenian invaders Mr Hammond was curious as to the authenticity of the story and if it was true he wanted the facts He wrote me a letter and as a result of it I published a brief article in the *Tribune and Telegraph* designed to uncover the ore if there was any

Many letters followed from correspondents in the Ridgeway section and the general opinion seemed to be that Sam had long since joined the angels The first suggestion that he was still wearing coats and shirts came in an anonymous letter from Stevensville Here was the message

Sam Johnston
Rock Creek B.C.
This is Mr Sam's address and he is very
much alive

A letter was sent to the address given and brought back an immediate response from the redoubtable Sam That response was as follows

SAM JOHNSTON

Erstwhile Soldier Sailor Smuggler Customs Officer
Now a Gold Miner at Rock Creek
Br itish Columbia

SAM JOHNSTON

A picture taken when he was a young man

Sam Johnston's Own Narrative

In answer to your request of 3rd inst. To the first place on Thursday night I was stopping at a hotel at Fort Erie about mid night Two parties by the name of George Nattle and Geo Stevens roused us up and told us a dozen of traders from the American side notified them that the Fenians were landing their arms at the Blast Furnace dock to cross in to invade Canada and a body of men had marched down on us So I sent I heard a horse coming up the street I looked out and it was Corporal Nolan going to the Grand Trunk to notify Ottawa I at once set find a family on the Garrison Hill came back and took a double barrelled gun into Grant Warren's store and asked them to load it for me I struck back across the commons and routed another family I later met Mr Dennisson accompany with John Douglas of Fort Erie

To get back to the front street the Fenians were to pass around a bend in the river and they gave me quite a fusilade The bullets flew round me pretty thick I noticed a picket fence ahead of me and I made for it and they ceased firing I struck out to the upper end of the town and ran under the old railroad track and passed under it until I reached the lower end They were about a hundred feet below me I stood under the dock and took an estimate They were marching eight men to the column across I counted the column and there were one hundred and thirty-six At that rate there were one thousand and eighty-eight men

When they passed I ran back up to the old mill race and cross ed on Douglas's Hill The Fenians were forming on the commons below I happened to drop my eyes to the bottom of the hill and I spotted two Fenians in the barrow with rifles and fixed bayonets I struck back across lots until I came to Henry Bowen's He had his team hitched up and the family was moving out I told him I wanted a horse He told me to take one She was of Kentucky stock I had the best bred horse in Welland County

I went on out to Stevensville and got a doctor and go forth My brother William started to go out the Bowen Road The Fenians were located at the mouth of Dutchman's Creek on the new Ryan farm On the way out Willson Bowen went with us mounted, and Henry Bowen followed a foot When we got to where the railroad crosses the Bower Road we could see a heavy picket about a quarter of a mile ahead We halted and pretty soon a picket of two men mounted and two men on foot with rifles approached within a hundred yards I halted them and I asked them who they were and what they wanted The reply was they were Fenians and they were going to take Canada With that the two men on foot charged their rifles I told the parties with me

that we had better get They would take out horses as they were armed and we were not So we dropped back to Stevensville and in the evening John Richardson went with me

We went out the Bowen Road We got close enough at times to hear them talking All night they moved down the river We kept on their track and in the morning at Buck's Corners I stopped to get my revolver out of it at the Main Street A John Donaldson and another party struck for the bush and started they were coming through the cedar swamp I struck for the cross road leading south When I made the turn I saw one of them horse runaway They ran me to Emerick's Hill but my horse left them at every jump Their main body was pushing on in the direction of the Ridge Road My comrade Mr Richardson jumped his horse across the fence and struck for the bush I rode right direct to Ridgeway I crossed the rail road between the pilot of the locomotive and the locomotive with the three cars of volunteers They detrained on the north side of the train I passed on to the north side and met James Morin father of Colonel Morin I asked which was the Colonel in command I then approached the Colonel and asked if he was in command He said he was and I told him the Fenians were within two miles of us and coming this way The first question was Have they any artillery? I said No He then asked if they had cavalry I said No and told him they had some men mounted but didn't have saddles and I carried no swords He asked me how many men they had I told him fifteen hundred I spoke to him then and used these words Why not ambush them? He wore glasses and instead of looking through them he looked over them with the expression "Are you in command or me?" He then asked if there were a Magistrate present Squire Peter Learn standing beside me threw up his hand and said he was one He asked him if he knew me and he stated he did He asked if he could rely on my report He said he could He asked him then to go out and see what he could see and with his son Alanson went out mounted

In less time than five minutes the bugle sounded It was a very still morning You could hear it for several miles The Fenians were at that time a half a mile north of the Bertie Road They marched to the Bertie Road and took up a position on the Bertie Road crossing the Ridge Road where they had a stone fence At the same time they had John Argue's brick house on the corner and across the road on the opposite corner a big high log barn

When I asked Colonel Booker to ambush his men on the north side of Ridgeway there was a big lane bush running east and west and a rail fence running the same direction and about two hundred yards above the Ridge Road there was a thicket of pine balsams where one battalion could quarter

The Fenians had no idea of meeting the volunteers there They expected to meet them on the Welland Canal

It was the Welland Canal that was their object They collected at the Garrison Road The Fenians picket was on the Garrison Road and it was there that the battle commenced They drove their pickets in and across to their main body rousted their main body

The Fenians took up their position on the line fence between the Stoneman Farm and the Huffman Farm leading east and west

When they took that position they had a number of horses parked at the house of this Feget probably 20 When they fell back to their second position for every horse that they had there were three or four men Colonel Booker seeing this move sounded the centre thunking they were going to make a cavalry charge Booker sounded the centre and formed two solid squares to receive cavalry The same es were not any more than formed when three men were knocked out of one of our squares Booker lost his head and sounded the centre The Queen's Own and 13th Battal on dropped back to the ridgeway and Fort Colborne went The Fenians followed up to Ridgeway and then dropped back to Fort Erie in two bodies one down on the railroad and the other body by the Garrison Road The body moved down the railroad with the intention of capturing the International Steam Ferry But Captain May righted them and steamed over to the American side the body passing down the Garrison Road When their rear body passed Lewis Palmer's place a very old man struck across to the Bertie Road and then to Fort Erie and notified Colonel Dennis who was in command of the Welland Field Battery and Captain King and McCallum who had been landed in the morning All told they were fifty-six strong of both companies Colonel Dennis ordered them up to the village school house where in the morning they had captured 85 Fenian prisoners Camp followers and such they brought down to the tug *Robb* and put down amidship under the deck

Leaving nine or ten men on board of the *Robb* he lined them up on a cross street Then he had to go to see Dr Kempson the Reeve of the town The Fenians were entering on the brow of the Garrison Hill and commenced firing on this body With that Captain King ordered the men to take shelter and five as the Fenian horse came down on them They captured 22 prisoners in Lane's house and marched them to the old fort as prisoners of war Captain King was wounded and John Bradley a man by the name of Hardison and a man by the name of Schofield These I was acquainted with and I think fifteen others There were several Fenians killed on Sunday morning at Fort Erie I was standing on the sidewalk and could feel the planks jiggle I thought it was a boy and didn't think any more about it But all at once I

saw a man crawl out and I took a scrutiny of him and he had as fine a map of Cork as I ever saw and I nailed him. This same June 4th, on Monday, I was taking dinner at a hotel and there was an old Scotchman came in and called the Mistress in to an adjoining room and he requested her to let him have a boat that night to take a Fenian over the river. He said he wanted to get the devil away. I could overhear the conversation and I at once went out and notified two soldiers and went and got him. The following day I received word that one Michael Shea was wanted and I went into his place. When I went in he was sitting at a little cubbyhole and he jumped back from the hole and stuck on the lathing. He came right through lathe and all and I took him down to headquarters. He had a horse and wagon and had been out foraging with a Fenian Corporal and guard among the farmers for supplies for the Fenian army. But he showed he was forced and was given his liberty. A day or two later I heard there were two deserters out of the Regulars and at once I struck out up the lake shore. When I got up about three miles I noticed a man ahead and I struck out for where I thought I would meet him. There was no man there. It was after dark. I noticed a rail fence running north from the road. I jumped over it and followed this fence a short distance and spotted him. I crawled over between the riders and nailed him and took him back to camp. When I got a short distance from the picket I met the other fellow between two colored ladies. The colored ladies had furnished him with a suit. He spoke to the fellow I had and the fellow's reply was "I am gone." I rushed that fellow in to the picket and struck back after this other one and another party got his hand on him about six inches ahead of my hand. They were court marshalled and got either three years and three months or four years and three months. They could have been shot for deserting in front of the enemy. Now I go back to Friday morning. Friday morning at 8.30 the United States Revenue Cutter *Michigan* ran down the rapids with Old Glory floating to the breeze with orders to anchor at the bridge and not to let any more over and not to let them back, and at the same time they took a piece of the *Michigan* and mounted it on the deck of the tug *Harrison*. Then the tug *Harrison* patrolled the river. When they made their get away they jumped a Canadian wood barge in Buffalo and poled her in one of the ports and got a tug that was up there to hitch on and tow her over to Fort Erie. There O'Neill had his force on the dock ready to board. They boarded this barge, landed his twenty two prisoners, shook hands with them and said good-bye, stating he would come again.

As the tug scurried out in the stream the tug *Harrison* fired a shot across her bow and they were taken down astern of the *Michigan*. So it was settled between the U.S. Government and the

Imperial Government and Canadian Government as to what to do with them. They were landed after and shipped to their homes, New York, Boston, New Orleans, Saint Louis, Chicago, Cleveland and such. There were thirty thousand in Buffalo ready to cross. Their arms were stored in a Buffalo building and a number of years later it burned down with thirty-one thousand stands of arms in it.

This ended the campaign of '66. I was qualified in this way. First day in 1861, I went into the quarter-master's department, Washington, D.C., and on the first day of April, 1864, was transferred to the army of the Potomac, then lying on the Rappahannock in front of Lee's army and attached to the 50th New York Volunteer Engineer Corps. It was attached to the Second and Fifth Army Corps under the command of General Warren of the 5th, and General Hancock of the Second, and Sheridan's Cavalry.

I saw all the movements of the army of the Potomac and Sheridan's Cavalry during Grant's campaign. This qualified me for the position I took in 1866, as Scout and Guide.

I could have taken one hundred men that morning, say fifty of the Queen's Own and 50 of the 13th and cut them to pieces and no doubt captured the whole bunch. I often saw men under fire, but I never saw men stand better than they did.

The time I was dismissed from the Customs, the Anger brothers at Niagara Falls were in conversation with Dr. Ferguson and Dr. Ferguson admitted to them that McKenzie Bowell, Minister of Customs, said I was the most efficient officer on the force and was very much opposed to my dismissal. If the Anger brothers, editors of the Niagara Falls *Review*, are living, there is no doubt they will recollect the same.

This leaves me a prospector at Rock Creek, B.C., in my 81st year.

SAM JOHNSTON, EIGHTY-ONE YEAR OLD HERO OF THE FENIAN RAID, NOW LIVING IN HUT AT ROCK CREEK, B.C.

BALMORAL CASTLE IN THE ROCKIES

R. A. McKelvie, in a recent article in the *Vancouver Province*, which has been widely copied, gives some interesting details about Sam. Mr. McKelvie writes:—

In a hole scooped in the gravel near the river at Rock Creek, thirty-five miles from Grand Forks, B.C., lives an aged man. His hut is not as large nor comfortable as the keekwillies—or underground habitations—which the missionaries induced the Indians to desert half a century ago. The walls are composed of old scraps of driftwood, broken mine timbers and bits of packing cases, while

the roof is made of several old rusted pieces of corrugated iron one of which is removed during the day to serve as a doorway and window. A farmer might use such a place for a tool house but he would refuse his stock in it—and yet in the hearts of one of the nation's heroes Canada's Paul Revere.

Sam Johnston, still sturdy of build despite his 81 years with keen penetrating eyes that flash with animation when he recalls the days of his adventurous youth and a full, deep throated voice and merry laugh, is the occupant of this borrow. While time has failed to gain the full advantage of four score years fortune has dealt unkindly with him. The $15 a month pension he receives from the government and all the money he has for food and clothing. And he never complains of what fate has done to him.

Canada is commencing to study her traditions. Historical societies are springing up throughout the Dominion and the story of the country is being examined by students who see in the past a wealth of romance and wonderful power of inspiration. It was this new interest in the memories of other days that brought once more to light the part played by Sam Johnston when the Fenians raided across the border from Buffalo in 1866. Toronto papers gave publicity that the meagre scraps of information on that could be gathered from the scattered survivors of those stirring times about old Fort Erie and historical bodies discussed the incidents of the affair. But what had become of Sam Johnston?

Columns were written about Sam and his picturesque past—soldier, sailor, smuggler and customs officer in turn—but nothing definite could be learned of his movements in the last quarter century until Sam himself wrote from Rock Creek denying much that had been said about him.

Possessed of a remarkable memory, a ready wit and keen sense of humour, he is a general favorite about Rock Creek. Little children rest and men and women treat him with respect, deplore his misfortunes and express appreciation of his character. Well read, his advice is often sought and his opinions given consideration on matters of discussion.

From the store house of his memory, beneath the willows that shade Balmoral Castle—as he has dubbed his home, he recently told the writer the story of that day in June fifty-two years ago when O'Neill and his wild freebooters set out on their hate-brained exploit on to capture Canada.

I was at the hotel in Fort Erie, he explained, when word came to us that the Fenians were loading arms on a boat at the blast furnace dock at Buffalo.

There were so many rumors going the rounds, that I did not pay particular attention to them, but still I did not feel easy. I went to my room and several hours later, about 1 o'clock in the

morning I heard the beat of a horse's hoof and looked out and saw a mounted man Then I knew that there was something to the story

I hurried out of the hotel after giving the alarm and ran up the hill to warn a family living there Then I turned and ran back across the common to tell another family As I turned to retrace my steps I saw the Fenians coming They were about two hundred yards from me. They saw me and opened fire Three bullets cut through my clothing one grazing my right arm

I knew it would be of no value to find out how many there were so knowing the country better than they did I ran turning and twisting until I was out of range Then I doubled back and hid beneath a railroad trestle which I knew they would cross Those I counted there as they came by only a few feet away They were marching in 138 ranks of eight men each

About three miles away I met a man named Bowser who had a fine Kentucky blooded horse the fastest in the country I made my way towards his farm warning everyone along the way I told Bowser about the Fenians and asked him for a horse saying I wanted to carry the news along the roads and to the soldiers He at once gave me Bob the Kentucky horse and away I started

I was joined a little later by my brother and two other men Soon we came on a Fenian picket of two mounted men and two on foot We halted about two hundred yards from them The dismounted men had fixed bayonets I called out Halt who are you? What do you want?

We are Fenians, and we've come to take Canada was the answer

At they gave answer the two men with muskets started to load, so we turned and went back I was the only one armed I had a big American army revolver but it was rusty

We got round to the flank of the main bunch and we kept scouting about them until morning was well along I was getting my revolver oiled by a blacksmith at a crossroads shop when I looked up and saw ten mounted Fenians behind me and three in front I jumped on my horse and made a dash just as they tried to get me

Up a hill we went, my animal running away from their slower beasts Why they didn't shoot me I don't know for I was close enough They did fire but while the bullets whistled around me, none hit me or the horse either

As I reached the railroad track an Ridgeway the pilot engine of the troop train was coming in followed a few yards behind by another engine with nine cars full of troops I took a chance and headed for the tracks pressed my knees to Bob's side and the horse cleared the tracks at the bound right between the pilot engine and the one following

A few minutes later Sam said he had told the colonel in command of the incoming troops that the Fenians were within two miles of the town. Both sides lost several killed and wounded in the battle that followed. The Fenians later in the day seized old Fort Erie which had not been used since the War of 1812 or thereabouts. The Fenians however, were all over the world that they had invaded Canada and had captured Fort Erie. They did not tell what it was like and people who did not know thought it was a second Gibraltar.

A newspaper reporter got the Fenians out of Canada. He was from a New York paper and he went through the lines on the fort and told O'Neill that five thousand Canadian soldiers were coming.

The Fenians then were one captured a barge and rig, loaded their men on the barge, released their prisoners and sailed away. O'Neill was arrested by the United States marshall when his army crossed back into the United States.

That did not end the war however for Sam Johnston for the Fenians learned of the part he had played and sent word that the next time the Fenians invade Canada they will bring your head back to Buffalo on a pole.

Several years later Sam went to work as a driver on the horse car line Buffalo. There was a notorious Fenian bully named Jim Lyons a man who weighed 248 pounds. He threatened that he would get the young Canadian but Sam was a considerable fighter himself in those days.

This particular Fenian attacked Sam on the car one night and gave the surprise of his life for Sam floored him.

A few days later with eight companions he lay in wait for the driver at the end of the line and assaulted him. In the fight which followed Lyons received such a pummeling that he died from the effects of his injuries a few months later.

Many an exciting tale Sam can tell of the old smuggling days on the Great Lakes. Whisky could be bought for one or two shillings a gallon in Canada and sold for several dollars in Buffalo while coal was purchased in Buffalo for 4 to 8 cents brought three or four times as much in Canada.

When the national policy was introduced and the Canadian customs was enlarged Sam was appointed inspector for his district. He is proud of the record he established during the three years and ten months he wore the uniform of the customs and of the seizures he made.

Sam Johnston came to British Columbia in 1858 and for the last twenty-five years has been mining in the interior. He has the savage to an attempt to recover gold from the Kettle River just above the mouth of Rock Creek. For many years he had

leases on the river beach. He still thinks there is gold in plenty in the creek which escaped the miners of the 60s when Rock Creek had a population of five thousand. Today less than a dozen houses make up the community. And one is Balmoral Castle, where I was the hero of Kidgeology.

SAM JOHNSTON'S HORSES REMEMBERED BY AN ONLOOKER

The writer is indebted to Brig. Gen. E. A. Cruikshank of the Historic Sites and Monuments Board of Canada, Ottawa, for the following letter which contains interesting reference to the part played by Sam Johnston in the Fenian Raid:

I well remember the first time I saw Sam Johnston. It was on the morning of 1st June, 1866. I was then not quite twelve years of age. When I was aroused that morning from a very pleasant sleep by my father about six o'clock he informed me that the Fenians were over and he wished me to go with his plough-man, John Bennet, and take away his horses of which he had about a dozen, to some place of safety. We took a very hasty breakfast and set off with a buggy and a light wagon and a string of lead horses. We had no instructions except to warn my brother-in-law, who lived about two miles distant, and then place the horses somewhere out of reach of the invaders. From this knowledge of proceedings of the Confederates raiders in Pennsylvania my father thought it probable that the first act of the Fenians would be to capture all the horses they could find which was actually the case as they commandeered fifty or sixty in the immediate neighborhood of their landing point.

We drove westward on the Garrison Road to the road between the Fourth and Fifth Concessions N.R. then turned north and made the first stop at the house of my brother-in-law, T. E. Miller where we acquired another string of horses, with another driver and carriage. We then went northward on the same road until we came to the crossing of the Bowen Road where fifteen or twenty men and boys had assembled. All were unarmed except one man who had two shotguns. We halted to give and receive news.

In a few minutes a horseman came galloping toward us along the Bowen Road from the direction of the river. He was bare-headed and his hair was long and tangled. He wore a long tight-brown overcoat on which was spotted here and there with dried mud. Somebody recognized him and said he was Sam Johnston, the smuggler. When he reached the group he had a terrifying tale to tell. Fifteen hundred Fenians had landed and they had 150 pieces of cannon which seemed to me even the rather one of proportionate to the number of men. They had killed Dr. Kempson, the Reeve of Fort Erie and all the lookout party of the Royal Canadian

Rifles. My recollection is that he said he had seen their dead bodies. As he was riding down the river road the Fenians had fired at him and he exhibited holes in his overcoat, which he said had been made by their bullets. He would hardly have escaped had not the *Michigan*, a United States revenue cruiser, come down the river at that moment and swung her broadside round in a threatening manner, which diverted the attention of his pursuers.

Not all of these statements were, of course, verified in the future, but no one ventured to question their truth and the group hastily dispersed. We turned westward and travelled with considerable speed without any very definite objective except to get out of the way of the blood-thirsty raiders. The roads were dry and hard and the weather was calm and sunny. On the road ahead of us and behind us and on parallel roads we could see carriages and lead horses travelling in the same direction. We met none going the opposite way. Opinion seemed to be unanimous as to the proper course to take. We kept on until some time in the afternoon we reached Timothy Hann's carding mill near Stevensville. I cannot remember why we went there, but it was a tolerably secluded place with plenty of sheds and stable room and hay for the horses. Here there was a large mill-pond and three houses, one of which, fully furnished, was unoccupied, and we were told that we might lodge there. About twenty women and girls were collected in the largest house but the men were all away trying to obtain news.

My rest that night was broken several times by the sound of stray shots and galloping horses, which seemed alarming and were never explained. About eight o'clock next morning while standing beside the mill pond I heard a few shots in the direction of Ridgeway, which soon became a steady roll of musketry. We then knew that fighting was going on and six or eight of the men saddled horses and rode off towards the sound. Before the fight had reached its crisis this group of horsemen arrived at a jog in the road in the low ground west of the Ridge Road, some distance to the rear and right of the Fenian position, where unfortunately they were sufficiently conspicuous to be seen and give color to the alarm of "cavalry." From that point they had a good view of both firing lines and remained looking on until the retreat began. In about two hours they returned to the mill with the news that our troops were beaten; they had seen them running. I do not think I ever felt more dispirited, for in my childish ignorance I never supposed it possible that British troops could ever be defeated. We had no alternative but to resume our inglorious retreat with the accession of as many young women and girls as we could convey. I was driving the buggy and much to my confusion was asked to take a girl a little older than myself. I was desperately shy and I

doubt whether I spoke a word to her in the whole journey. Somebody suggested that we should take refuge at a certain house in the Short Hills, where our herd of horses would be secure, and this proposal was adopted. I believe the owner of the farm was a relative of the Hannas. We passed through Welland in the afternoon where we heard all kinds of alarming reports and I overheard some strongly disloyal remarks from an Irish seaman at the bridge which did not raise my spirits much. We reached our destination before dark to find the house crowded with other fugitives. We deposited our load of lad es there, fed our horses and ourselves the best way we could, and slept in the hay in the large barn very comfortably.

Early next morning we heard that the Fenians had left the country and we began our return. Some time about the middle of the afternoon we arrived at New Germany where a small military camp had been formed by a party of the 49th Regiment. I had then become the driver of the democrat wagon and team of horses and was impressed by a civilian. I demurred and was told very insolently that I must obey. I still objected when an officer, Lieutenant Lloyd, came up and explained very politely the necessity of having the wagon and team. This soothed me considerably and I part of course I would be glad to assist them. Four soldiers of the 49th and three miserable prisoners were crowded into the wagon and I drove to the camp on the heights overlooking the village of Fort Erie at a walk, arriving there after dark. On the way the escort amused themselves by re forming the prisoners over and over again that they would be shot in the morning. Such are my reminiscences of the Fenian raid, which I remember much better than many later events of more importance.

HISTORY OF NATURAL GAS IN ONTARIO

By D. A. Coste

The history of natural gas in Ontario commences thirty years ago. While small quantities had been found prior to 1889 in wells drilled for oil and for water, or were known to be coming out in natural springs from the ground in several places in the Province, it was on the 23rd of January, 1889, that the first production in commercial quantities was struck in a well located on the north-west corner of Lot No. 7, in the 1st Concession of Township of Gosfield, in the County of Essex (you see our forefathers had almost struck the nail on the head in naming that Township). This well, which was drilled to a depth of 1031 feet, was found to have a capacity, 24 hours after it came in, of a little more than 10,000,000 cubic feet per day, and its rock pressure was 420 pounds to the square inch; and may I not be allowed to take a little pride in what I may call this discovery, not for myself—I was a mere newspaper man at the time—but for my brother, Mr. Eugene Coste, who located the well (in the very county in which he was born) and who formed the syndicate which drilled No. 1 well, and which afterwards became the Ontario Natural Gas Company.

The drilling of other wells by this Company quickly followed with varying success, all the good wells in the field being found within the small area contained in a triangle which had No. 1 well as its north-west corner, a point on Lake Erie 1 3-4 mile south of No. 1 and 2 1-2 miles east of Kingsville as its south corner, and Sea Cliff Park, south of Leamington, six miles from No. 1, as its south-easterly corner, the base of the triangle being therefore all along the shore of Lake Erie. Some 90 or 100 wells, if my memory serves me rightly, were drilled by this Company in the Essex field.

The gas was for two or three years used only in the nearby

towns, viz., Kingsville, Ruthven and Leamington. In 1894 some 30 wells or so having been completed, an 8-inch pipe line was laid to Windsor, and gas was supplied to that city and to Walkerville and Sandwich. A year later a pipe line was laid across the Detroit river, and gas was sold to the residents of the city of Detroit. This marked the first extravagant use from wells in Ontario of this priceless fuel, which was followed two years later by a supply being sent to Toledo through an old line which had previously been used from the city of Detroit. It is almost needless to say that the field, while it had a number of large gassers, did not cover a sufficient area to warrant the enormous pull put upon it, and in 1904, after a winter of constantly lowered pressures on the wells, the gas rock was found to be badly invaded by the salt water immediately below it, and the first natural gas field discovered in Ontario was abandoned. In those days the operators did not have the means which are at hand today to take care of the water. The places supplied on our side of the river had to go back to manufactured gas.

This field, since it is no longer a producer, does not interest us as do the others discovered afterwards.

To complete the history of the production of natural gas in Essex, I must state that in addition to the field referred to above a nice little pool of gas was also found in the Township of Mersea about 1 1-2 mile north-east of Leamington, and some producing wells were also drilled at the north end of Point Pelee, but the life of these wells was of short duration. A number of dry holes have also been drilled in different parts of the county, viz., several north of Comber, from which some oil was obtained, one west of the Village of Tilbury, several in the northern part of Mersea Township, a deep well in the vicinity of Olinda, two or three in Maidstone and in Rochester, one at Essex, two in Colchester Township, two near Amherstburg, and a few more, the location of which I do not really know.

The history of the Welland field is now in order. It, as its predecessor, is also 30 years old, but with the difference that although pretty ancient it is still alive.

The first operation in this field took place in May, 1889, when a syndicate organized by my brother and myself leased a large acreage of land for oil and gas, and located No. 1 some seven miles

east of Port Colborne on Lot No 35 in the 3rd Concession from Lake Erie in the Township of Bertie In the following August this well was completed with a flow of 1 700,000 cubic feet of gas per day in the White Medina sandstone at a depth of 836 feet with a rock pressure of 525 pounds to the square inch The Provincial Natural Gas and Fuel Company of Ontario Limited was then organized (and with a name of such length how could the gas field do less than have a long life) Development of this new gas field in it quickly turned out to be such, was actively pushed and in the fall of 1890 after 25 wells had been completed an 8 inch pipe line was built in an easterly direction from the then centre of production on to the Niagara river a distance of about 18 miles for the purpose of supplying gas to Buffalo it having been impossible to raise money in Canada for the lines to reach distant Canadian towns moneyed men feared the gas would play out Three lines one 8 inch the other two each 6-inch were laid across the river and in the winter of 1890-1891 gas was first sold to the Buffalo Natural Gas Company (now the Iroquois Natural Gas Company) for distribution to a portion of its consumers Buffalo had been supplied with natural gas from the Bradford field some 80 or 90 miles distant for some 4 or 5 years prior to this time The Village of Bridgeburg was piped by the Provincial Company at this time In 1891 the Erie County Natural Gas Company a Buffalo Company having secured some territory and drilled several wells also laid an 8-inch pipe line to the Niagara river and two 6-inch lines across the river to Buffalo where for a few years it supplied a small part of the city, where it had a plant formerly fed by a few small wells in the north end of Buffalo itself The Village of Fort Erie was at this time piped and supplied with the natural gas by this company A few years later the Erie County Natural Gas Company's holdings in Welland County were purchased by the Provincial Company

In the meantime the Bertie Natural Gas Company had been organized and had drilled several wells and piped the Village of Ridgeway which is to this day still using natural gas

The Mutual Natural Gas Company had also been organized at Port Colborne and had met with immediate success in their wells west of that village the gas being piped to Port Colborne Hum

berstone Village and in Welland. Some fifteen years later the Mutual Company sold some of its wells and the Welland plant to the Provincial Company, the remaining wells and the plant at Port Colborne being transferred to a new company, the Sterling Natural Gas Company, which is still doing business under the able management of Mr. C. E. Steele.

In the Fall of 1903, the export of natural gas to Buffalo having been stopped, the Provincial company laid an 8-inch pipe line to Niagara Falls, Ontario, and piped the city. The head office of the company is located there.

Gas was found in our Well No. 1 at a depth of 856 feet, but the White Medina is not the only source of supply in the Welland field, as in many wells to the north of where the original first wells were drilled, gas was found in the Clinton limestone, this formation being about 110 feet above the White Medina. Some gas has also been found in a few wells on Point Abino in the southern extremity of the Provincial field, in the Guelph and Niagara limestone, from 200 to 300 feet above the Clinton. This gas contains a small percentage of sulphur. A little gas is occasionally found in the Red Medina sand, and in three deep wells out of 14 drilled by the Provincial Company to the granite or depths of from 3030 feet to 3420 feet, a little gas has been struck in the Trenton and in the Potsdam.

The Provincial company has up to-date drilled and purchased 468 wells, which are located in the Townships of Bertie, Humberstone, Willoughby, Crowland and Wainfleet, all in the County of Welland. To this number of wells must be added from 150 to 200 more drilled by other companies and individuals in the Welland field.

We now come to the very considerable production of natural gas which has been developed in what has been called the Haldimand-Norfolk gas field, and which has of late years been extended into the east part of the County of Elgin, and also into the County of Brant. The wells in this field have not been found to be as large as in some other fields in Ontario, but far many more of them have been drilled over a larger area than that covered by other fields.

Following closely upon the discovery of natural gas in Welland County, the first wells in this field were put down to the winter of

1889-1890, in the vicinity of Caledonia and at Dunnville, and while not large, these wells gave sufficient encouragement for the drilling of others. It was but a short time after the drilling of the two wells just mentioned when many small operating companies engaged in drilling, but it was in 1905 that the Dominion Natural Gas Company, then composed mostly of Pittsburg gas men, came into the field, and having leased a large acreage, drilled a considerable number of wells, and in the same year laid a line to Hamilton.

In 1906 the Manufacturers Natural Gas Company laid a line from Selkirk to Hamilton. This company had no gas of its own at the time, but purchased its supply from local operators, and sold it in Hamilton for industrial purposes.

The Dominion Natural Gas Company, through itself and its affiliated companies, is by far the largest operator in what I will call the Haldimand field, for short. This company, which was later purchased by the H. L. Doherty interests of New York, has to date drilled and purchased 1181 wells, 395 of which either came in dry or have been abandoned, leaving 786 wells still on the lines.

Besides the gas obtained from its wells, the Dominion Company purchases a good deal of gas from a number of small operators. Gas is sold at Hamilton, Brantford, Dundas, St. Catharines, Dunnville, Cayuga, Galt, Simcoe, Tillsonburg, Paris, Port Dover, Port Rowan, and in a number of other towns and villages, and throughout the Townships through which the pipe lines are laid. Some 21,500 consumers are supplied direct by the company and its subsidiary companies, and in addition gas is sold wholesale to the United Gas and Fuel Company of Hamilton, who in turn retails it to about 20,000 consumers.

The wells throughout this field vary in depth from about 600 feet at the northern end of the field, to about 1400 feet in the southern part, and gas is obtained sometimes in the Clinton, sometimes in the Red Medina, and also in the White Medina.

As I have stated above, a number of companies and individuals are operating in the Haldimand field, and while I cannot mention them all, I will give the names of some of the principal ones. The Warner Root Gas Company have drilled a number of wells in the Townships of Cayuga, Rainham, Dunn, Canboro and Walpole. Lalor, Atkins and Smith have put down wells in Dunn, Sherbrooke

and other townships F L Snively one of the old drilling contractors has also put down a good many wells for himself and others the National Gas Company has also operated quite largely in several townships as also the Producers Natural Gas Company the Holmes Gas Company the Fort Colborne-Welland Natural Gas Company the Standard Natural Gas Company The Medina Natural Gas Company and others and practically all towns villages and hamlets in the several counties I have mentioned are supplied with natural gas

The next and last natural gas field of importance in Ontario which may well be called the Bothwell field is located in the County of Kent in the Townships of Tilbury East Romney and Raleigh and usually known under the name of the Tilbury field

The first well in this field was located on the Kerr farm Lot No 10, Middle Road North Tilbury East Township It was drilled by the Acme Oil Company of Detroit and completed in December 1905 with a flow of about 40 barrels of oil per day and a volume of gas estimated at a quarter of a mill on cubic feet per day Those of us who were in the business at the time well remember the excitement which prevailed Syndicates and companies were formed over night and in a short time many wells had been put down a number of which produced a considerable quantity of oil These wells were almost all located in a northerly direction from the Kerr well for a distance of about 3 miles In but very few exceptions flows of gas were struck in these wells varying from 50 to 300,000 cubic feet per day but no attempt was made to save the gas and it has been estimated that over two billion cubic feet of gas were wasted from the mouths of the wells in order that the oil might be freely gotten out

It was in the late summer of 1906 that well No 1 on the Halliday farm about 1 chain distance north of Fletcher drilled by a syndicate which I had formed was completed this well came in good for 6,000,000 cubic feet of gas per day and while not to what is today the gas field was really the start of the natural gas business in Kent County The Volcanic Oil and Gas Company was then organized and a 3 inch line was laid to Chatham and in March 1907 the first gas was put into the mains of the Chatham Gas Company Within two or three months however it was found that this well

was quickly turning to oil, and two other wells of the company which had just been completed south-east of the Kerr well were hurriedly connected to serve the situation.

In the meanwhile the Leamington Oil Company of Detroit since the Canadian Gas Company had brought in a well good for some 7 000,000 cubic feet of gas, at the northern end of Lot 181 Talbot Road Survey some 7 miles almost due south of the Kerr well and again considerable excitement prevailed. Several companies rushed into the field among them the Volcanic Oil and Gas Company, the United Fuel Supply Company, the Ridgetown Fuel Supply Company, the Rondeau Oil and Gas Company, the Maple City Oil and Gas Company, The Beaver Oil Company, The Halfaday Syndicate and others. A number of good wells were quickly put down, and competition for the securing of the available market ensued. In the late summer of 1909 the Volcanic Company, having made a contract to sell gas to the Windsor Gas Company for distribution in that city, laid a main line half 8-inch and half 6-inch to Windsor, a distance of a little over 40 miles. This company's line to Chatham had prior to this time been changed to a 6-inch. Now it is an 8-inch for almost the entire distance of about 22 miles. At about the same time as the Volcanic Company entered Windsor, the United Fuel Supply Company and its associates the Ridgetown Fuel Supply Company and the Rondeau Company, having made a contract to supply Sarnia with gas, laid an 8-inch line to that city, a distance of about 60 miles. The Beaver Company shortly afterwards laid a line to Leamington and Kingsville and again these two places, the first to be supplied with gas to Ontario from the Essex field, were enjoying the benefits of a natural gas supply. A line was also laid by the Northern Pipe Line Company to Wallaceburg. This company obtained its supply of gas from the Leamington Oil Company. Another line was laid by the Ridgetown Fuel Supply Company to the Village of Ridgetown and as far east as Highgate. The Volcanic Company at about the same time laid a line to Blenheim to supply that village.

With all these companies in the field, each one of which was bidding for business, franchises were obtained and contracts were entered into for the sale of gas at prices far below the proper ones at which natural gas should ever have been sold and enormous

waste resulted for the Gas Companies while the cities, towns and manufacturing concerns supplied benefitted greatly.

It was on January 1, 1912, that for the purpose of better conservation of the field the Union Natural Gas Company of Canada Limited was formed. This company amalgamated all the interests of the Volcanic Company, the United Fuel Supply Company, the Ridgetown Fuel Supply Company and the Rondeau Oil and Gas Company and controlled by contract the supply of gas of the Canadian Gas Company to the United Company and to the Northern Pipe Line Company.

In 1913 the Glenwood Natural Gas Company a new-comer financed by American capital having acquired the field holdings of the Maple City Oil and Gas Company and purchased the Beaver Oil and Gas Company, started the drilling of a number of wells in the field several of which were put down in Lake Erie, a few hundred feet from the shore. In the same year the Southern Ontario Gas Company which was a pipe line company laid a 12-inch pipe line all the way to Hamilton, a distance of approximately 150 miles and the gas conveyed by this company which is purchased from the Glenwood Company, and the Beaver Company is sold to the Ingersoll Gas Light Company and the Woodstock Gas Light Company who retail it respectively to the residents of Ingersoll and Woodstock. The Southern Ontario Company also sells gas to the Manufacturers Natural Gas Company at Hamilton for its industries there besides selling gas direct at Dundas, Rodney, West Lorne, Highgate and a number of other places including a few consumers at London.

The gas in the Tilbury field is found in the Onondaga and the initial rock pressure was about five pounds to the square inch.

To the operations of the Union Company in the Tilbury field I now must add what this company and others have done in the way of deep drilling to what is known as the Dover field located some 22 miles or so south-west of Chatham. On May 15, 1922 a well was brought in, in the Trenton limestone on Lot 5, Concession 3, Township of Dover West at a total depth of 3285 feet good for 6,500,000 cubic feet of gas. The Trenton had been struck at 2883 feet and five distinct pays of gas were encountered from 2365 feet to 3268 feet, at which point the most of the gas was found.

This well which had a rock pressure of 1225 pounds to the square inch showed a little spray of oil and again excitement prevailed. The Union Company has since the drilling of the first well completed 12 wells in the Dover field, two of which are producing gas only while four others are producing both gas and oil, the remaining six wells having come in dry. Two of these dry holes were drilled down to the granite to depths of 3765 feet and 3735 feet. Besides the wells of the Union Company several other deep wells have been drilled in Dover, some three or four of them not by the Central Development Company, but in all cases failures have resulted, and the large new find which was hoped for, has not materialized.

I have given you a long history upon the finding of gas in the four principal fields in the province, but even at the risk of trying your patience, and to make the history fairly complete, I must speak at some length of the gas well which was found a few years ago near Oil Springs. In 1914 Dr. Fairbanks of Petrolia drilled in a well south of Oil Springs in the County of Lambton, to a depth of about 1300 feet, which actually measured at the mouth of the well some 30,000,000 cubic feet of gas, with a rock pressure of over 800 pounds to the square inch. This was the biggest well ever drilled in Ontario, and naturally attracted a great deal of attention. The Union Company and several other companies and individuals then started operations in the neighborhood, and some thirty wells were drilled within a radius of five or six miles, but with poor results indeed, one well only, that put down by the Oil Springs Oil and Gas Company within 300 feet of the Fairbanks well, being a really good well.

The Union Company having made an agreement to purchase the gas from the Fairbanks well, laid a 6-inch line to Petrolia, a distance of 12 miles, which also was connected with the Sarnia line of the company, but in three months the gas in that well as in that of the Oil Springs Company's well had practically petered out, the pressure having gone down to 40 pounds. The Union Company in the end had expended over $200,000,000, and had come out at the thin end of the horn, and there were others.

Many wells have been drilled in other parts of Ontario, but unfortunately the results were of little or no value, and many dry holes have resulted.

I will now give you some figures to show the very large amount of money which has been invested in the natural gas business in the province. These figures should convince everybody that natural gas has played a very important part indeed in the life and prosperity of many people. They surely show that every effort should be made so that the business may be kept going as long as possible.

The following is a close estimate of the wells which have been drilled:

	Wells Drilled	Wells now Operated
Essex field	175	none
Welland field	700	300
Dominion Nat. Gas Co.	1681	786
United Gas Co.	113	43
Beaver Company	64	23
Glenwood Company	92	77
Union Company	203	149
Canadian Gas Co.	43	42
Miscellaneous	350	
Totals	2923	1420

You will see by this table that 1420 wells out of the total number drilled are still being operated, which means that 1503 wells either came in dry or have been abandoned.

The 2923 wells drilled I have averaged at a cost of $1 500.00 per well, giving us the sum of $7 425 000.00.

The following is a close estimate of the main lines and field lines which have been laid to convey to the markets the natural gas from the several fields:

	Cost Main Lines	Cost Field Lines
Essex field, 60 miles	$ 450 000	$ 150,000
Welland field, 92 miles	700,000	500,000
Haldimand field, 152 miles	1 200,000	1 200,000
United Gas Co., 27 miles	225,000	75,000
Beaver Co., 34 miles	260 000	25,000

Southern Ontario Co., 150 miles	2,250,000	
Glenwood Co.		175,000
Union Co., 205 miles	2,400,000	300,000
Miscellaneous, 60 miles	350,000	300,000
Totals	$7,835,000	$2,725,000

You will see by this table that the very large amount of $10,560,000 has been expended in the laying of pipe lines.

The following amounts are also closely estimated to have been expended before the natural gas has reached the consumer:

City plants served with natural gas and service lines	$6,500,000
80,000 meters, at $12.00 each (average)	960,000
Paid in rentals for wells	2,500,000
Compressor stations	600,000
Miscellaneous other outlay	2,000,000

All of the above, which is more likely to be under the mark, comes to a total of $30,535,000.

I have also closely approximated the number of meters in use at 80,000, which means, figuring on 5 persons to a family, that 400,000 men, women and children in the Province of Ontario are enjoying the benefits of natural gas in their homes at the present time.

NATURAL GAS DISCOVERED WHEN PETROLEUM WAS SOUGHT

By Grayson H. Smith

The data I here present on the history of natural gas in the County of Welland is from records and information gathered from the citizens of the county.

Outside influences often change lives as well as industries from the path that they originally began. The natural gas industry is an exception to the rule and without the petroleum industry the natural gas industry would perhaps never have been born.

Petroleum was discovered and used ages ago. It is recorded that the people of Babylon and Nineveh used it 2,000 years before Christ. Pliny described Oil and Aetrgentine brought from the Island of Sicily and burned in lamps by the Romans about the time of Nero. Marco Polo during his travels in the thirteenth century discovered the fire temple at Baku in the Caucasus, the home of the ancient fire worshippers, whose shrine was a burning spring, the fire from which was not extinguished until the drilling of wells in later years drained its supply of petroleum. The people of Persia, Arabia, China and India utilized petroleum in its crude state taken from springs.

The discovery of oil in North America can be credited to the Seneca Indians, who found it in the form of an oily scum floating on the surface of ponds and streams. It was utilized by them for medicinal purposes and their method of obtaining it was by means of a blanket soaked in the fluid and then wrung out. About the first record of petroleum in America was in a letter written by Joseph de la Roche Daillon a French Missionary in the year 1629. Later in 1750, the commander of Fort Duquesne mentioned the springs in Oil Creek in a letter written to General Montcalm.

In 1775 George Washington dedicated to his country as a national park a tract of land which he had pre-empted, located in West Virginia, containing a burning spring. This, too, was leakage from crevices in the ground.

Petroleum and natural gas were both found in the salt wells drilled along the Kanawha River in West Virginia about the year 1815. It is recorded that the first producer of petroleum in America was Hiram Hill of Titusville, Pa., who gathered and barrelled seepage oil along Oil Creek and shipped it to Pittsburg, Pa., in rafts. Dr. Kier of Pittsburg was perhaps the first oil refiner in America, for he successfully distilled some oil taken from salt wells at Tarentum, Pa., in 1850, nine years before Col. Drake drilled his famous first oil well at Titusville, Pa.

In the year 1812 the Gas Light and Coke Co. of London, Eng., obtained a charter to supply artificial gas to that city. William Murdock was the inventor of coal gas and lighted his house with it in the year 1792. He was connected with the above mentioned company when they first applied for their charter, three years before it was finally granted. At the time of the first application before the House of Parliament a great deal of ridicule was directed toward Mr. Murdock and his company.

Natural gas was first observed in the United States in the burning springs, so called, that were found at many places in the Appalachian Mountains. The first attempt to utilize this fuel commercially was at Fredonia, N.Y., in the year 1825. While removing an old mill which stood partly over the Canadoway stream, some bubbles were observed to break frequently from the water, and on trial were found to be inflammable. A company was formed, and a hole an inch and a half in diameter being bored through the rock, a soft limestone, the gas left its natural channel and ascended through this. A gasometer was then constructed, with a small house for its protection, and pipes being laid, the gas conveyed through the whole village. About one hundred lights were fed from it and sold to the consumers at one dollar and a half yearly each. The gasometer used collected about eighty-eight feet in twelve hours during the day.

After the completion of the Drake Well in 1859, oil companies and oil wells sprung up very fast in Pennsylvania. Matthew Ri

chardson of Port Colborne made a trip to Titusville and on his return was evidently instrumental in forming a company and commenced drilling operations for oil on Lot 31 Con 1 Township of Humberstone on the farm of David Steele father of C E Steele this was in 1864 or 65 Some of the men connected with the company were Mr Hellems of St Catharines who was President of the Company John Mathews John McCullough Mathew Richardson Chet Carter Lewis Carter David Steele John Schofield Samuel Norcross and I suppose several others The track sold at $25 or per share and David Steele leased his farm for 25 years

The rig used was something similar to the ones used today but smaller and lighter This rig was sold to the company by Mr Hellems and the drilling was done by day work The rope cable used was purchased by John Mathews in Oswego and cost about $100 00 for approximately 1,000 feet The actual drillers were Nelson O Brien and his brother in law John Elliott of Port Robinson The size of the hole was 5 inches in diameter They would drill about 6 feet pull out the tools take off the bit and put on a reamer and ream down the 6 feet again the object was although they kept the tools turning continually to make a more perfect hole

Sulphur gas was struck at 320 feet Evidently they struck gas in the Clinton formation and from information gathered I think they had at least an open flow of 500 M cubic feet per day Of course they were drilling for oil and the gas was more or less of a nuisance They piped the gas back under the boiler and used it for fuel for a time but owing to the water collecting on top of the gas, it came in puffs and one day the well caught fire and exploded After that they went back to their old fuel The drilling after the gas was struck continued under different conditions There was no casing or pipe of any kind in the well The water service and salt would collect on top of the gas which would make pressure the water would be blown about 30 feet in the air and any person near by would get a shower bath

This continued until they were down 845 feet at which depth the well was abandoned The tools were left in the well this was in 1866 Of course the oil industry was in its infancy at this time

The salt water was taken and boiled down to see if they could make a salt well out of it. The red medina was tried out as a weather proof paint and in fact the story was once circulated that they had discovered gold!

The Steele well kept blowing water and gas into the air for years. About 1870 Jefferson Steele who lived and still lives on the farm by means of a small pipe would blow up a pig's bladder and carry it to his house and burn the gas for curiosity.

In 1872 Titusville, Pa., was piped for natural gas for domestic purposes. This was the first real effort to sell gas for all purposes, the gas being delivered through a 2-inch line from the Newton well about 5 miles south of Titusville.

In 1886 Jefferson Steele gained some information from a man by the name of Robinson who had been in the gas fields of Pennsylvania. They put a leather packer similar to what is known as a screw packer today down about 400 feet connecting it with a ¾ inch pipe brought some of the gas through it and piped it to his house. Of course, water and gas came out at the same time.

He had two wooden tanks made one to fit inside the other telescope fashion. These tanks were about 5 ft. by 7 ft. or about the size of an ordinary cistern. The gas and water would come into the bottom tank and the gas taken out of the top one. This was practically a gasometer and regulator combined. The gas from the well he had not use escaped between the two tanks into the air. After he reached the house with the gas through a 3 4 inch pipe they first burned it without air and of course they collected a great deal of carbon on the cooking utensils. Robinson and Mr. Steele had an air mixer made out of tin, something similar to two dippers telescoped and which they could regulate the air. I would say that this was the first natural gas burned for domestic purposes in Canada.

During the time this well was being drilled or shortly after it was abandoned an oily scum or what looked like oil was noticed on a pond on Lot 5, Con. 11 in the Township of Crowland on the farm of Lemon Dell. This oil boom was drifting from U.S. and Edward Redpath, then a prominent merchant of Lundy's Lane, succeeded in forming a company which consisted of about twenty-five members of the immediate vicinity of the Dell farm and the

stock sold at $25 per share. A location was made close to this pond and drilling operations commenced in the summer of 1866. The rig used was similar to the one used in drilling the Steele well. A rope cable about 3 inches in diameter was used for drilling and they drilled a six inch hole. A Frenchman whose name could not be remembered from Pennsylvania owned the rig and did the drilling. The contract price was to be $600.00 for the well. At about 550 feet, on March 13, 1867, they struck gas and immediately the well took fire and all equipment was burned leaving the tools and rope cable in the well. You must remember that there was no casing or pipe of any kind in the well and the bystanders could not understand the water and gas coming out together and the gas continually burning, wondering why the water did not extinguish it. From information gathered, this well must have had an open flow capacity of at least 500 M. cubic feet per day. Even today wells of that size when once caught fire generally burn all equipment and are not easily extinguished.

The well was immediately abandoned and like some of the enterprises of today a number of the shareholders had subscribed for stock, but had not paid for it and never did. The bulk of the paying fell upon Mr. Redpath.

This well forced water and gas from it for years when a stranger whose name I could not get, put up a small pole derrick, and salvaged the tools and rope, selling some of the rope cable to the citizens in the vicinity. I had the opportunity of seeing a piece of it and it consisted of 3 one-inch lines woven together, making a 3 inch cable. From information received I do not think there was any gas sold for domestic consumption from this well. The people on the farm and vicinity were frightened of it and decided to leave it alone. I am greatly indebted for most of the information obtained about this well, to Alfred Pearson.

After the towns of Pennsylvania and Western New York had been piped for natural gas and had proven a success, the Port Colborne Natural Gas Light and Fuel Co. was formed with C. McNeil Sr., President, and D. Hughes, Secretary-Treasurer, and began operations in 1885. The corporation of Port Colborne contributed a bonus of $500 to the enterprise with the understanding that if the company was successful the amount was to be repaid to the

village to gas for lighting the streets. The well was located on village Lot No. 7, South Charlotte in the village where the Guild Hall now stands.

The well was drilled by a Mr. Johnson of Petrolia. The rig used was known as a pole tool rig, where ash poles bolted together in about 30 foot lengths and the stem or drilling bar screwed on the end. These were screwed together and lowered into the well length by length and taken out the same way, to change bits or run the bailer as they went down the length of one pole another pole was added. These poles answered the same as our wire line or rope cable.

Salt water was struck at 455 feet and gas at 765 feet, but not in sufficient quantities to satisfy the company. The rig was then changed to a cable rig and the well drilled down to 1230 feet at which depth the tools got fast and are still there. The open flow capacity was about 10 M. cu. ft. per day or at that time estimated at 200 ordinary jets. A one inch pipe was laid around the village and gas sold to consumers for lights only. This pipe was laid around the business portion of the town on West Street around to the Catholic Church and as far down King Street to DeW. Carter across the canal down East Street and around to McNeal's tannery then up Welland Street to Mr. Mathew Richardson's. The rate charged was $1.50 per light per month or approximately 5 cents per light per day. If they were not burned the full month each night a rebate of 5 cents per light per night was made to the consumer and sometimes the bill would be $1.30 or $1.35 for the month.

The time intervening between the striking of the gas and the laying of the pipes Mathew Richardson, one of the shareholders had a large rubber bag which he would fill with gas from the well carry it over to his residence which he had piped for lights and burn it in jets around the house. Of course he made several trips per week.

A great deal of trouble with these early wells was caused by water, even if the casing was right evidently they never figured that the salt water came in with or near the gas and needed immediate attention as soon as drilling operations stopped. At this time no precaution was taken to take care of the water and as a rule the small capacity wells were soon drowned out.

After the finishing of the well as you may call it where the Guild Hall now stands, Mathew Richardson made a contract with Mr Johnston to move his rig over the canal and drill on Lot No 20, West Fares in the village of Fort Colborne near Mr Richardson's residence. Richardson paid Johnston $800.00 and furnished power casing etc and one man to help. This well was also drilled with the pole tool rig. Salt water was struck at 400 feet cased at 450 feet with 5 inch casing below the casing a 4 inch hole was drilled to the bottom which finished at 750 feet. In those days most wells were shot as it is termed to splinter the rock where the gas is struck, to increase the flow but unless this operation is carried out correctly and the well thoroughly cleaned out afterwards, it was as a rule a detriment, rather than a benefit to the well. Eighty pounds of nitro glycerine were used in shooting this well but the drill refused to run the tools in again to clean out the hole, claiming a cave-in might occur above the tools and he would lose them. In this shape the well was left. Although Mr Richardson had a good sized iron gasometer made and spent a great deal of time in trying to collect the gas the open flow capacity was very small and even today a little gas escapes from this well. The only gas sold, was to a few of his immediate neighbors and that only for a short time. This was in 1889.

The following year Samuel Hopkins Sr drilled a well in the rear of the Hopkins Block Fort Colborne but this too was of small capacity and as there was no way of taking care of the water it soon drowned out and no gas of any account was sold out of it.

This short paper concludes the early history of the attempts of the pioneers of Welland County to establish the oil industry which after years of drilling in later years proved to be an impossibility and although financially these early wells were not a success yet the money was not spent in vain for it gave the stimulus to the next generation to go on and develop the natural gas fields of Welland County.

THE FIRST SIGN OF GAS IN WELLAND COUNTY WAS AT BURNING SPRINGS—GOURLAY MENTIONS IT IN 1817

By George Wells

Many of the older residents of this district well remember the "Burning Springs" at Niagara Falls. They were located on the banks of the great cataract of the Niagara River between Chippawa and Niagara Falls. As a very young lad, on my way to Drummondville with my parents to do marketing, I well remember the big sign on the side of the roadway "To the Burning Springs." As I remember the legend as to its discovery it was while workmen excavating at that point for a spring well when one of the workmen in lighting his pipe set fire to escaping natural gas that was emitting from a crevice in the rocks. This discovery of a burning spring was another wonder of the world for the sightseers in those days who came to Niagara Falls. It then dawned on the mind of some of the promoters of the many points of interest that this would be a money-maker and accordingly it was extensively advertised as the "Wonderful Burning Springs at Niagara Falls, Canada." It was visited annually by thousands of tourists every summer from all parts of the world. That is the first that I remember of the commercializing of natural gas in Niagara District. Whether the Burning Springs are in existence today or not I cannot say, but the sign was there a few years ago. I remember a story that was told of a son of the Emerald Isle who was sight-seeing at the Falls, was asked by his guide what he thought of the burning springs when he replied "That they were robbing God of what He intended to burn the world up with."

To complete the chain of this gas story it will be necessary to leave the Burning Springs and take you to the great Petroleum Oil Fields of Pennsylvania—which would be about the year 1864

in 1865—where flowing wells of petroleum oil were being produced by the hundreds—and where thousands of people were flocking to make their fortunes in oil and where cities were building up in a night. A number of people from this district joined the great army of oil seekers but not many succeeded in making fortunes but a few came back who though themselves rich in geological knowledge of the earth's substances and instilled it into the minds of a few of the people in the district that the prospects for petroleum oil was as good near Pennsylvania and then commenced the formation of companies for the drilling of oil wells.

We quote the following paragraph from Mr. Robert Gourley's history of the Township of Stamford in the County of Welland, to the year 1817:

"Of the minerals there are none, except bog iron and one limestone there is abundance it being the general seat of the Township, all the bank of the Niagara River being of this as also the rock over which the Niagara Falls pour. No plaster of paris has yet been found of a good quality some marl no salt rock some salt licks on the banks of the Chippawa no salt springs. Several inflammable gas springs which issue out of the bank of the Niagara River from the mouth of the Chippawa River and extend about one and one-half miles down. The air from some of those when confined in a tube, will burn constantly."

The first company for the drilling of wells for petroleum oil was organized in the Township of Pelham on Tuesday Sept. 12, 1865, and was called the Pelham Oil Well Company. The first meeting of the shareholders was held in the Barsley School house with Dr. Fraser chairman and John F. Crow secretary.

The capital stock of the company was $2,000 fully subscribed. The following gentlemen were elected as directors: Saml. Beckett, Rufus D. Castleman, Jos. Garner, Daniel C. Roland and Nehemiah B. Ward. I have no information as to what property the well was located but the company started drilling operations that fall but in the early spring of 1866 they met with a misfortune by losing their drilling tools in quick sand and that apparently wound up the company's operations although they received their charter on May 1866 but we have never discovered where they have done

any further work or that they ever found any indications of oil or gas They sold the drilling machinery to another oil company try

PORT COLBORNE OIL COMPANY

On Thursday February 14 1866 a meeting of the citizens of Port Colborne was held at Hardison's hotel for the purpose of organizing an oil company The capital stock was fixed at $6 000 Lewis G Carter was appointed to the chair The following were appointed trustees John Gordon Port Colborne Chas Hellems St Catharines John Matthews and the Messrs Carter Port Colborne Drilling operations were commenced on a well on Tuesday May 6th 1866 on the property of David Steele a short way west of Port Colborne The well was drilled to a depth of about 500 feet when quite a large vein of natural gas was struck when the tools became fast and operations for drilling for petroleum ceased Natural gas flowed from this well for a number of years before it dawned upon the mind of man that it could be used for commercial purposes Nothing further was ever done in this section as to drilling for petroleum oil

CROWLAND OIL WELL

On August 26 1866 a company was formed by Drummondville capitalists for the drilling of a well in Crowland Township for petroleum oil The well was located on the farm of Lemon Dell near the historic village of Cooks Mills as the geologists who had just returned from the oil fields of Pennsylvania claimed the soil in that locality resembled very closely the soils of Pennsylvania where all the rich oil fields were being produced. High anticipations by the farmers of the community that in a few years Cooks Mills would be a bustling city like the oil cities of Pennsylvania with its many oil refineries

The machinery for the drilling of this well was procured from the promoters of the Feltham Oil Well In March 1867 when at a depth of about 500 feet operations at the well were temporarily suspended on account of the large quantity of natural gas emitting from the well The force with which the gas rushed from the well was such that at times it threw up jets of water from 20 to 25 feet completely drenching everything in the derrick room

The discharge of gas gradually became less, the flow of water decreased and the employees resumed work, but for only a few days, when one evening between the hours of 10 and 11 o'clock, when the discharge of gas increased to such a degree as to ignite with the lights of the workmen almost instantly enveloping the derricks in flames and totally destroying it. The shareholders met on the 14th of March that year to make arrangements for the rebuilding of the derrick, but it was finally abandoned.

A number of years after the well was abandoned the gas was piped into a near-by house and used in the cook stove, for cooking purposes. (If memory serves me right the name of the family was Quinlan or Quinland.) The house was located a short distance from the well.

We think it strange these days in the progress of science that the mind of man should have lain dormant for these many years without seeing the great commercial value of natural gas—for it was many years after this before natural gas became a great commercial commodity in this district.

Since this article was written there has come to hand Vol. III of the Simcoe Papers, edited by General Cruikshank. One letter quoted is from a gentleman to his friend, descriptive of the different settlements in the Province of Upper Canada (New York, November 20, 1794) and there is a paragraph on the discovery of natural gas in Welland County. Since this is the earliest reference to natural gas we have seen the paragraph is here reproduced for its historic interest.

Amongst many other natural curiosities, a spring about two miles above these falls attracts the attention of the curious—emitting a gas, or inflammable air, which when confined in a pipe and a flame applied to it, will boil the water of a tea kettle in 15 minutes. Whether this may hereafter be applied by machinery to useful purposes, time will determine. It was lately discovered in clearing away and burning the brush under the bank of the river to erect a mill, and was observed after the brush was consumed to burn for days together, to the great astonishment of the inhabitants.

ORIGINAL AND HISTORY OF THE DEVELOPMENT OF NATURAL GAS

By Chas E Steele

To tell the whole story of the origin and development of natural gas would require volumes and many phases of business activities would be vividly depicted, for there are few enterprises more taxing or more difficult than the natural gas business The industry comprises three separate and distinct branches, each containing many sub-branches interesting and important and each sub-branch containing sufficient material for a reasonably long article Those branches are Production Transmission and Distribution There are certain economic scientific and business laws which in a marked degree, run through and bind together all those branches but for the purpose of this paper I will confine myself more particularly to distribution The story of the distribution lines in both urban and rural communities and a study of the system necessary for the control and regulation of the pressures would be interesting, but we will consider distribution only under three heads namely Waste Conservation and Price

WASTE

Welland County is the oldest producing gas field in Ontario the first commercial well being drilled in the Township of Bertie in 1889, by the Provincial Gas Co The early history of the natural gas industry of this field is similar to that of practically all fields The mistaken idea prevailed that because the early wells were large producers the supply was practically limitless This old but vital error was followed by a large measure of waste Wells were sometimes allowed to remain open for a considerable time after being drilled in and leaks in gas lines were not promptly re-

paired. The more serious loss, however, in the field, has resulted from the ridiculously low price at which gas was sold in the early days. In 1892 the Mutual Natural Gas Co. supplied the Erie Glass Co. at Port Colborne with gas at one thousand dollars per year, and the only stipulation contained in the agreement was that the use should not exceed two hundred thousand cubic feet per day, which figuring three hundred days use would be at the rate of one and two-thirds cents per thousand cubic feet. It requires no argument to impress a Welland audience with the inevitable result of selling natural gas at such a price. This price, of course, was unusually low, but immense quantities have been sold for industrial and domestic use at prices ranging from five to twenty-five cents. For a number of years in Welland County practically all gas sold for domestic use was sold at a flat rate, that is, so much per stove per month, and available records show that gas was supplied for a cooking stove and a heater for use during the entire year for $27.00, and that without any limit upon the amount consumed. It naturally follows that a commodity sold at a fraction of its real value will be wasted, and there is no more outstanding example so definitely shown as in the operation of the distribution and sale of this valuable commodity. Natural gas in Welland County and practically throughout the gas producing area of Ontario contains about 1000 B.t.u. per cubic foot, while artificial gas usually contains about 400 B.t.u. per cubic foot, but rarely exceeding 500, which makes natural gas about twice as rich in heating properties as the artificial gas. In the early days exceedingly crude and inefficient appliances were used in the stoves, in the furnaces, for lights, and indeed everywhere. This was to be expected because the gas cost practically nothing. Producer and consumer were alike ignorant of the value of this wonderful fuel and ignorant also of the fact that the supply would inevitably diminish and ultimately become exhausted. In a business place in Welland County (in the early days) the proprietor was burning gas lights throughout the place during the day, and when asked by a customer why he did not turn them out, replied that the gas light was "cheaper than the sunshine." Many interesting and almost unbelievable stories could be told of the use of gas in the early days. When meters were not used and gas sold at a flat rate,

people often kept their stoves burning continuously, and explained it by saying that they wanted to get even with the gas company. The waste in the early history of the natural gas business was inevitable from the circumstances which attended the development of the field. There are close analogies in the history of other industries. The pioneer settlers of this country cleared the forests from the land and burned the brush and logs to get them out of the way. If lumber had been worth its present price this would have been an appalling waste, but the imperative need was for land and there was a seemingly inexhaustible supply of timber, so their action was inevitable and logical.

The natural gas industry has progressed from a condition of abundance to one of scarcity in a fraction of time required by the lumber industry, but the steps have been exactly the same. Unfortunately, there is one striking difference between the lumber and natural gas industries. Scientific forestry effects a perpetual production of timber. The best that can be done with natural gas is to so conserve the remaining supply that as little as possible of it will be lost, and to direct its use so that it may be made of the greatest possible service to the communities which enjoy its benefits. Every one of the processes through which natural gas passes before it reaches the consumer is accompanied by waste, as the operation of a machine is accompanied by friction. By proper design and construction friction in machinery can be reduced to any desired minimum. In the same way, waste of natural gas can be cut down. If a machine must be marketed at a low price, it is impracticable to make it as easy running as a similar mechanism selling at a higher price. For the same reason, the waste in handling natural gas has always been greater than that of manufactured gas, which commonly sells for several times as much.

The gas consumers in this section are gradually but surely appreciating the necessity of co-operating with the gas companies in improving facilities for burning gas, so as to bring about the conservation. The abandoning of flat rates charged in the early days, and substituting therefore instruments for measuring the gas was absolutely necessary, but the consumer, unconscious of the benefits which would accrue to consumer and producer alike, opposed the placing of gas

meters. Those little instruments were the monitors which emphasized the truth of waste and induced the consumer gradually to abandon the appliances originally used in the consumption of gas. The old pipe and log burners full of big holes and bigger cracks first gave place to the three and four way burner on ordinary cooking stoves and later these burners and stoves were put aside for gas ranges. The incandescent lights with proper combustion appliances took the place of the old jumbo burners and flat flame tips. Natural gas was turned in many furnaces by simply inserting ordinary gas pipe but today where gas is utilized in furnaces in all it is through the use of scientifically arranged burners which produce the most satisfactory results.

From an experience of twenty years in the natural gas business I am confident that I do not over-estimate when I say that through our Welland County one thousand cubic feet of gas is today giving as great if not a greater service to the consumer than ten thousand cubic feet did in the early days. If economic appliances had not been brought into use there would be no natural gas in Welland County and indeed it would have been exhausted years ago.

I said I would confine this paper more particularly to distribution but as I have referred to the more economic appliances used by the consumers I wish also to direct to the producers to say that the gas companies have for the most part thoroughly applied themselves to the work of conservation. Having had special opportunities of observing the handling of natural gas in the country I want to state that we owe considerable to the wise and economic methods persistently applied by the Provincial Gas Co. for had the pioneer company in this old territory been one less careful and thorough this field would have been extinct years ago.

Another marked step in the economy of distributing natural gas is in the reduced pressures made possible first by the improved regulators and more of them and secondly by ways of scientifically constructed facilities for burning. In the early days consumers thought their supply very limited unless they had at their disposal a pressure of something like one pound to the square inch and unfortunately in a great measure this deplorable condition still exists in the rural districts more especially in the western part of the province. While motoring through the gas areas of Kent and Nor-

folk a few weeks ago, I saw dozens of individual gas regulators along the country highway loaded with bricks and other objects placed there by the consumers to give them a very high pressure service. These methods are slowly but gradually being eliminated and instead of it being necessary for the companies alone to correct this unwise and wasteful practice, the consumers should really be the first to stop the practice, and they no doubt would if they realized the immediate danger to their homes and their property. There is an old adage which says, "We never miss the water till the well runs dry," and me-thinks that what the sage really put was, "You never miss the gas till the well runs dry."

The Provincial Government has framed considerable legislation, very largely with the object in view of conserving the remaining supply of natural gas. We have said that Welland County is the oldest producing county in the province, dating back to 1889. There was, however, some gas produced in the County of Essex prior to that time, but the field soon became flooded with water and was abandoned. We may, therefore, consider that the natural gas industry began in this county, and in the year 1889. From that time until 1919 there was practically no government control. The natural gas industry was conducted as any other business, or at least as far as the nature of the industry would permit. Companies arranged with land owners for permission to drill wells on terms agreeable to both parties. The companies were free to sell gas where they desired, and at such prices as they could secure. The companies were in fact absolutely free to manage their own business. Gas was being found in large quantities—in fact wells that would be considered very fine wells today were not then kept, and in order to secure a market contracts were made with industries for large quantities of gas. In the year 1919 a distinct shortage of gas for domestic use was experienced in the Counties of Essex and Kent. The Government was appealed to, and asked to take some steps to compel the gas companies to discontinue the sale of gas for commercial purposes, so as to insure a sufficient supply for domestic use. In compliance with this request, the Government issued peremptory orders compelling the gas companies to discontinue to a very large degree the sale of gas to industrial plants. This order had the effect, of course, of breaking contracts

between the gas companies and industrial concerns which they had been supplying. Later in the session of 1919, the Legislature passed an Act which was known as the Natural Gas Act of 1919 and which contained many regulations and restrictions intended to control and direct the gas companies in their operations. Ostensibly the thought in the minds of the legislators was the conservation of the remaining supply, but it is significant to note that the first Act, as already stated, was known as "The Natural Gas Act," whereas it will be found that in 1921 the Legislature passed another Act known as the "Natural Gas Conservation Act," which suggests that even our legislators were progressing in thought and research.

The action of the Government in 1919 had the effect of placing the natural gas business in the list of public utilities, although the companies have always maintained that the natural gas business should not be treated in the same manner as other public utilities, and I believe a study of the situation will convince any person that their contention is sound. In the first place, the search for natural gas is purely and clearly a mining enterprise, just as hazardous as any other mining enterprise, and no doubt some of you could tell how great that is. Not only is the search for natural gas a mining hazard, but after gas has been discovered, it is so elusive that what we appear to have today we may be unable to find tomorrow, whereas in the mining of solid minerals once a paying vein is struck it remains intact until removed.

There is no doubt, therefore, that the natural gas business, in a very vital sense, differs from every other public utility. Money invested in the search for a supply is very often lost entirely, and the same holds good throughout the operation, for, particularly in these later years, a majority of the wells drilled are either useless or so small as to make it difficult to secure a return sufficient to justify retaining them. Then again, the gas company, unlike other public utilities, are dependent upon one source, which begins to diminish as soon as found, and when the gas supply is gone there is no way of renewing it, and the companies must either go out of business or adopt means for producing artificial gas. Under the Act of 1921 provision was made for the fixing of gas rates made necessary for the reasons before cited. The Government realizing

that having interfered with contracts made between the companies and a large number of industries and thereby cutting off a large source of revenue in the companies some provision would have to be made to allow the companies to secure better prices from them than remaining consumers. This was a reasonable view to take in fact the Government could take no other attitude particularly as the action was taken at the behest of the domestic consumers and was intended to not only give them a better service but there for a longer time.

Conservation involves the partial sacrifice of the present to the future. No one can be induced to do this unless the future reward is greater than the present sacrifice. This puts the matter on a business basis the only basis on which it can be permanently successful.

When natural gas was selling at from five to twenty cents per thousand, or where gas was delivered for cooking and heating an ordinary residence for $27 00 per year it is obvious that it would not pay the consumer to invest much money or do much worrying about the amount of gas being consumed but as prices have increased conservation has fairly well kept pace. Let us now consider what would be a fair price for natural gas. Probably 50 per cent of the people of the Province of Ontario are dependent upon coal for heating their homes and when they buy they must go to the open market and pay the price asked. If coal oil or gasoline oil is required they also must be bought in the same manner. Those fuels for which natural gas is a substitute are not controlled by prices fixed by the province. This was true also of natural gas as stated previously up to the year 1913. As the commodity is now under the control of the Legislature and provision has been made and for the past four years has been applied fixing the rates, we must abide by those regulations and face the situation as we find it. Under those conditions and treating the industry as a public entity I would say first of all that the consumer should pay a price sufficient to give the company serving them a reasonable and equitable return and no more.

Before I conclude this paper I would like to give a few general facts showing the effect of the industry upon the public as a whole which I believe will stand a rigid comparison with any other industry, in the province.

The amount of capital invested in the natural gas business in the Province of Ontario is approximately forty millions of dollars.

A conservative estimate for the year 1923, according to the statement of a disinterested engineer, brings out the following facts. For that year substitute fuels would have cost three and one-half times as much as natural gas. The loss in money exported to pay for coal and oil would be $4,099,266. The loss in rentals (which were paid by the companies) $812,459. Loss in taxes and wages $889,075, or a total of $5,800,800.

This, according to the engineer referred to, would have been the loss sustained by the public if natural gas were not used, and had the companies not existed.

A great deal has been said, and references often made, to the fact that a number of gas companies in the early days made for themselves large dividends. That is admitted, but a conservative estimate will prove that for every dollar that the gas companies received in profits four dollars was actually saved by the gas consuming public. There are nearly half a million people in the Province of Ontario enjoying the benefits which accrue through the use of natural gas, and it is doubtful if any other industry in all of Canada so directly affects as many homes as the natural gas industry.

UNVEILING OF MEMORIAL CAIRN

A large number of people from every municipality in the Counties of Lincoln and Welland and with many from distant places gathered on the grey cold afternoon of Saturday November 29th 1924 at Allanburg to attend the unveiling of the cairn and tablet erected to commemorate the centenary of the turning of the first sod of the Welland Canal That sod was turned on November 30th 1824 by George Keefer of Thorold the first President of the Welland Canal

The cairn is of field stone It stands on the west end of the Allanburg bridge and is very close to if not exactly on the spot where the company gathered a century ago to witness the beginning of what was destined to be a great undertaking great in its relation to the development of this community and great as a factor in the progress of Canada

THE UNVEILING

It was fitting that the unveiling ceremonial should be so graciously carried out by Miss Catherine Welland Merritt granddaughter of the Hon William Hamilton Merritt founder of the Welland Canal father too of the first bridge to span the Niagara River and of the Welland Railway

Miss Merritt said—

"To commemorate the courage vision patience and energy of the men of this district who met at this spot to begin a public utility which has brought prosperity and success to our land also to congratulate their successors on their achievement today I have the honor to unveil this cairn and tablet This I do with the greatest pleasure

INSCRIPTION

The tablet reads:

"The Old Welland Canal

"Near this spot on 30th November 1824 the first sod of the old Welland Canal was cut by George Keefer President of the Welland Canal Company in the presence of William Hamilton Merritt, chief promoter of the enterprise and about 200 other persons.

"The great work connecting Lake Erie and Ontario for ship navigation was planned and carried out by a private company."

DEDICATORY PRAYER

His Lordship Bishop Clark of Niagara recited the dedicatory prayer as follows: "Present us, O Lord, in all our doings with Thy most gracious favor, and further us with Thy continual help, that in all our works begun, continued, and ended in Thee we may glorify Thy Holy Name, and finally by Thy mercy obtain everlasting life through Jesus Christ our Lord.

"In the Name of the Father, Son and Holy Ghost we dedicate this memorial to the Glory of God and in memory of Hon. William Hamilton Merritt, George Keefer and his associates through whose energy and foresight we meet to celebrate the turning of the first sod of the Welland Canal one hundred years ago.

"The Grace of our Lord Jesus Christ, and the Love of God, and the Fellowship of the Holy Ghost be with you all. Amen."

WARDEN SLOAT

Warden J. C. Sloat presided over the historic event. On the platform with him were Mrs. Catherine Welland Merritt, Hon. F. H. Keefer, Miss Janet Carnochan, Niagara-on-the-Lake; Bishop and Mrs. Clark, Ven. Archdeacon Perry, O. E. Fleming, President of Canadian Deep Waterways Association, W. M. German, K.C., M.P., Ed. Graves, M.P.P., and Dr. J. H. Coyne of St. Thomas, who represented the Historic Sites and Monuments Board and who was the chief speaker.

A LOYAL COMPANY

Enchantment was added to the scene by the presence of the 58th Lincoln and Welland Regimental Band under Bandmaster J.

Holden the Welland Sea Cadets who formed a guard of honor under Instructor Horace Cox the Daughters of the Empire from Welland and St Catharines with their standards and War Veterans from St Catharines and Welland

The programme opened with the National Anthem played by the band and sung by the assembly Then following the unveiling the band playing Rule Britannia and the historic event closing with the Maple Leaf

An impressive feature of the afternoon was the placing of wreaths at the base of the cairn Floral tributes were placed by the I O D E of Welland St Catharines Beamsville and Thorold and the G W V A of St Catharines

RECEPTION

Following the unveiling a reception was given at 'Oak Hall the historic Merritt home by Miss Catharine Welland Merritt Additional interest was lent to this very pleasing event by an exhibit of relics of a century ago chiefly pertaining to the canal These included the first plan of the canal Sir Isaac Brock's chest leather bound and brass studded was also shown

ST ANDREW'S DINNER

Saturday evening St Catharines Chamber of Commerce gave a St Andrew's night dinner at the Welland Inn where several hundred prominent men of the Niagara district assembled A silent toast was drunk to the pioneer canal builders Major H B Burgoyne the President of the Chamber of Commerce presided

Addresses were given by Frank H Keefer an old Thorold boy grandson of George Keefer the first president of the canal company Commissioner for Northern Ontario Lieut-Col W N Ponton of Sellerville Manager Hugh M Bell of the Chamber of Commerce Wm Dickers of St Catharines Mayor Jacob Smith St Catharines and others

DEDICATORY ADDRESS BY J H COYNE M A LL D F R S C
ST THOMAS OF THE HISTORIC SITES AND MONUMENTS BOARD
OF CANADA

THE cutting of the first sod for the Welland Canal was an event of no ordinary significance The Department of the Interior acting upon the advice of The Historic Sites and Monuments

Board of Canada has recognized its national importance by the erection of this memorial cairn with tablet and inscription near the spot where on the thirteenth of November 1824 George Keefer President of The Welland Canal Company in presence of about two hundred persons, cut the first sod of the original Welland Canal Of that ceremony tomorrow will be the hundredth anniversary

Little of all we value here
Wakes on the morn of its hundredth year

and those who took part with the speakers or bearers in that memorable gathering upon or near the ground on which we are now standing have long since passed away But the spirit of the pioneers of Lincoln and Welland has not passed away and their descendants are here today to join in paying honor to the leaders in this great undertaking From other parts of the province also representatives men and women are present to unite in this public tribute of remembrance and praise

On the earlier occasion the outstanding figure and principal speaker was William Hamilton Merritt originator and chief promoter of the enterprise We are fortunate in having with us at this gathering grandsons of both Mr Keefer and Mr Merritt and also the latter's granddaughter Miss Catharine Welland Merritt It was unanimously fitting that Miss Merritt should have been chosen for the high honor of unveiling the memorial and on behalf of the Department and the Board I have to thank her for having so graciously acceded to the request that she should do so

The story of the Welland Canal and Merritt's connection with its inception and promotion is full of interest and instruction It is to be found in many publications of which one of the latest is General Cruikshank's admirable monograph It has been concisely told in excellent special articles in the local and Toronto press Fortunately this renders it unnecessary for me to do more in the short time at my disposal than to present a few salient features

The War of 1812 emphasized the imperative necessity from the military point of view of a canal system for the St Lawrence and the lakes To young Merritt the idea seems to have come in 1812 while engaged as an officer of dragoons in patrolling the bank of the Niagara He was then a youth of nineteen In 1816 the be

came a practical question through the need of a satisfactory water supply for his mills at St. Catharines. But his views extended far beyond mere personal advantage. Across the Niagara frontier the projected Erie Canal was beginning to become a reality. In seeking public support its promoters claimed that it would attract to the city of New York the entire traffic of the north and northwest, including that of the Canadians north of the lakes. To guard against such a contingency, immigration from the States was discouraged, and every effort was made to attract immigrants from the British Isles to the new settlements in Upper Canada. But in any case, what would be the result if the only outlet for their products to the European market was through the United States by the Erie Canal and the port of New York? With statesmanlike vision Merritt saw the political peril confronting the nascent British communities, and from that time forward he devoted himself to the truly patriotic policy of an all Canadian route to the sea for the products of Canada. As a Loyalist to Loyalists he advocated earnestly and persistently the imperial as well as the commercial advantages of the construction of a canal between Lakes Erie and Ontario. He proceeded to enlist the support of leading public men, business interests and representative bodies in the scheme. It was denounced as wild and visionary. It was opposed by selfish personal and jealous local interests. Even more difficult to overcome was in the early stages the indifference, the inertia of the public. It was a long and uphill fight, but, step by step, he won out at last. Undaunted by rebuffs, delays and failures, which might easily have disheartened a weaker man, he proved himself

'One who never turned his back but marched breast
forward,
Never doubted clouds would break,
Knew we fall to rise, are baffled to fight better,
Sleep to wake.

Final success gave him the honored place he rightfully holds among the statesmen of British America. The canal now under construction is fourth in order from its primitive original, for which the first sod was cut one hundred years ago. Its ultimate expansion to meet the demands of the future will doubtless surpass our dreams of today. Advances will be made in naval architecture

and the machinery of propulsion, land, air and water will compete for the transportation of the world's commerce. But in the centuries to come, however distant they may be, it is within the bounds of human probability that the Welland Canal will continue to bear upon its bosom great ships, greater than those of today, laden with the commerce from all the ports and oceans of the world. And always with the Canal will continue to be associated the name of William Hamilton Merritt. It is pleasing to note that the filial piety of a grandson, the late Colonel W. H. Merritt, has provided a fund for a more imposing monument to be erected elsewhere at an early date to the memory of the founder.

Although it was not until 1824 that the first sod of the canal was cut, the initial step towards its construction had been taken six years before in a memorable experimental survey undertaken by Mr. Merritt, accompanied by Mr. George Keefer, Mr. John DeCew and other friends. A line for the contemplated excavation was run with the aid of a primitive water-level borrowed from a neighboring mill. It is not surprising to learn that a height estimated by the amateur surveyors as thirty feet turned out to be actually sixty feet by later expert measurements. The original plan of that first survey is still in existence in the family archives. It is an historical document of national importance.

Time would fail me here to make more than the briefest mention of the long continued efforts to finance the project. He enlisted the sympathy and support of members of the legislature such as Robert Nichol and Mahlon Burwell, John Beverley Robinson and his brother, Peter Robinson. The Hon. John Strachan was zealous in the movement. Merritt paid repeated visits to the centres of capital, Montreal and Quebec, New York and London. The Governor-General, Lord Dalhousie, the Lieutenant-Governor, Sir Peregrine Maitland, in Canada, DeWitt Clinton, Governor of New York, entered heartily into the scheme. He won the support of the Quebec Chamber of Commerce, the legislatures of Upper and Lower Canada, the London Times and the British Parliament. John Jacob Astor in New York and Rothschild in London enthusiastically approved the venture, but restrained their enthusiasm from materializing in dollars and pounds. Other New York capitalists would have gladly subscribed the entire amount necessary

but Merritt was determined to keep the control in British and Canadian hands. Little financial help could be expected from Upper Canada. The province was poor, settlers were few and far between. An official map of 1813 shows the towns of Niagara and York, but not a single village or hamlet between them and Burlington Bay. Such trade as there was, was carried on largely by barter, money being conspicuous by its scarcity. Of the original capital of 40,000 pounds, only one-fourth was taken up in Canada. When the first sod was cut, Keefer and Merritt had paid up on their shares $25, and DeCew and Thomas Butler $12.50 each. Such were the small beginnings of the great undertaking which, in its later development, has resulted in the magnificent Welland Canal system now in operation, representing a total outlay to date of some $80,000,000, and intended to provide in the immediate future for the passage of great ocean steamers drawing twenty-five and ultimately, if needed, thirty feet of water.

The Erie Canal was completed in 1825. Merritt lost no time in proceeding with his work. In November, 1829, by utilizing the Welland and Niagara Rivers vessels drawing seven and a half feet were able to pass from lake to lake, the canal being then completed from Port Dalhousie to the Welland River. Gaily bedecked with flags, they were greeted with enthusiastic welcomes by the admiring inhabitants lining the banks, whose wildest dreams had come true.

Meanwhile, other canal projects, embracing the St. Lawrence, the Ottawa and the Rideau, were being actively prosecuted, and thus was inaugurated what may well be called the greatest canal system in the world. Altogether, according to a recent statement, Canada has expended on her canals alone more than two hundred millions of dollars, and can boast of 465 miles of completed canals with 159 locks. This mighty achievement, representing a century of progress, owes its initiative to William Hamilton Merritt and his associates.

The fact should not be overlooked, that the original canal was financed and built by a private company. It was only in 1842 that it was taken over by the government, and in 1852 that the repayment to the shareholders of the amount of their subscriptions with six per cent. interest was completed. By that time $800,000 had been expended upon the undertaking.

Merritt's patriotic idealism and powerful business ability combined to give him the leadership as member of the legislature and in public and private enterprises in practically all matters relating to transportation whether by land or water. To borrow the words of the late Colonel W. H. Merritt, referring to his ancestor

"He promoted and carried to successful completion the first railway Suspension Bridge in the world spanning the gorge of the Niagara 1846-55 and the Welland Railway 1853-58. He was the proposer and first chairman of the St. Lawrence Canals Commission 1832, advocated the Sault Ste. Marie Canal, was principal promoter of the first railway charter in Canada the Niagara and Detroit Rivers Railway Company 1835-46 assisted the Great Western Railroad 1846 advocated daily fast Atlantic Steamships and gave impetus to many important improvements as President of the Council 1848 and Commissioner of Public Works 1850, in the Government of Canada.

The title of Father of Canadian Transportation may be justly claimed for him. Seven times he was elected to the Legislature. For the last two years of his life he was a member of the Legislative Council. He had rendered distinguished service as an officer of Dragoons in the War of 1812. He was present at the Battles of Queenston Heights, Niagara, Stoney Creek and Lundy's Lane and missed by a day being at the taking of Detroit being delayed by military duties. Such a record of public service entitles him to rank second to none among the makers of Canada.

The first settlers in the region now traversed by the Canal were men belonging to the famous Butler's Rangers, who were disbanded in 1784. They were largely pre-Loyalists, having their winter quarters at Niagara during the Revolutionary War and from that centre carrying on their military operations. That story has been effectively told by General Cruikshank in a pamphlet published many years ago through the liberality of the Welland County Council. Accusations brought against the Rangers by partisan historians have been shown by the General to have little or no substantial foundation. They and the later Loyalists who after the revolution abandoned home and property, the friends and associations of a lifetime, to hew out new homes in the northern wilderness, become the founders of British North America. They

brought with them their British laws and institutions, a profound sense of religion, a loyalty to the unity of the race and empire, and intensified by their sufferings and sacrifices, an ingrained abhorrence of treason. As Britons, they combined the love of law and order with the love of liberty, and that love they transmitted to the generations that followed.

The Revolutionary War had, as a consequence of the unsuccessful attempt to detach the French Canadian habitants from their allegiance to the British Crown, resulted in the elimination of many politically disaffected persons from the population of the lower province. The War of 1812 had had a like effect in the upper province as well. Successive invasions and plundering expeditions had united the inhabitants in a common feeling of animosity against the United States and of intensified loyalty to the king and mother country. It was only after many years of peaceful relations that a real friendship was re-established between Canada and the great republic. The idea of a national Canadian sentiment hardly existed. But the war, in bringing together in defence of their common country settlers from the scattered and widely isolated communities, had created or increased a feeling of common interest in the land that had required and might again require their common effort in a common defence. And so the War of 1812 may be said to have been the first step in the evolution of a Canadian as distinguished from an imperial patriotism. The feeling was not likely to be lessened by the avowed desire on the part of the advocates of the Erie Canal to bring Canada under the control of the States, and as a consequence into the Union. Thus the Welland Canal project, in addition to the natural hope and expectation of increased land values and other business advantages, appealed to the loyalty and patriotism of Canadians. The general interest was widened and deepened by the advocacy and practically simultaneous construction of the St. Lawrence, Ottawa and Rideau Canal Systems, including the Lachine Canal. Closer business and political relations attended and followed their construction and enlargements, and there gradually emerged in all the scattered provinces a feeling of common nationality, which was at last crystallized in the union of all British North America, except Newfoundland, in the Confederation we have today. In the early de-

velopment of the national ideal of a united Canada in loyal allegiance to the crown, and the wider ideal of a united empire rallying around the central throne the influence of the Welland Canal may be regarded as one of the most important factors.

Now that Canada has taken a recognized place as an equal among equals in the British Commonwealth of Nations, known as the British Empire—realizing the dream of "Canada First" and other visionaries of half a century ago—it is well to remember the contribution of Butler's Rangers and the United Empire Loyalists to the wonderful political aggregation which today ranges itself under the sovereign of Great Britain and the imperial flag. For they were the first to proclaim the principle of the unity of the British race and the British dominions under the sovereign and banner of England throughout the Seven Seas. For a century and a half, whether the sky was bright and clear or war clouds obscured the sun for a season, they and their descendants have maintained the principle and, when required, have sealed it with their blood in its defence as well as in the defence of their homes they fought against mighty odds in the War of 1812. The history of nations shows that as the twig is bent the tree is inclined. Strengthened by the large immigration from the British Isles, but using the same ideals, the same respect for religion and for law and order with British liberty, the influence of the Loyalists has been felt for good through the course of our national history. If Lynch Law has never been known in our Dominion, if train robberies have been so rare as to be almost unknown, if crime is repressed and punished to a degree unknown elsewhere on this continent, the credit is due in large measure to the tradition of respect for law and order handed down in successive generations of Canadians from the heroic men and women who sacrificed all rather than their allegiance to a high and noble ideal. It was for the unity of the Empire as well as the preservation of their province and home of the Dominion of Canada that Canadians put down with the strong hand the insurrections of 1837, of 1870 of 1885, and repelled the Fenian invasions of 1866 and 1870. To maintain the principle of a united empire, Canadian soldiers sealed their loyalty with their blood in the Crimea and on the African veldt. In adherence to the same principle Canada effected a reduction in imperial postage rates and adopted the sys

tem of imperial preference in import duties. Foremost of the Dominions in the councils of the empire, she has ever been first in its defence. The great imperial poet recognized that primacy nearly a generation ago in prophetic words:

"They who are wise may follow
Ere the war trumpet blows,
But I—I am first in the battle,"
Said Our Lady of the Snows."

And so, when the war-trumpet blew in 1914, Canada was first of the overseas dominions to range herself beside the Motherland. The victorious issue of the World War toppled many thrones, but the stability of our empire remained unshaken. Its bounds and its responsibilities are enlarged, its liberties extended. Canada finds herself in the first flush of world-recognized nationhood, and at the same time in still closer relationship with her sisters in the British Commonwealth, and with allegiance to the person and throne of the king and the flag of the empire unimpaired. Toward this consummation the United Empire Loyalists, the pioneers of Lincoln and Welland, with William Hamilton Merritt, their most famous citizen, and the wonderful canal system he inaugurated, contributed in no slight degree. We are here to pay them their due of honor and remembrance.

Could the founders of this settlement be with us today, to counsel and advise, what would be their lesson and message to their descendants, and those who are to follow? Would it not be to the effect expressed by the poet in lines well known to many among you:

Hold ye the Faith—the Faith our fathers sealed us,
  Toying not with visions—overwise and overstale
    Except ye pay the Lord
    Single heart and single sword
  Of your children in their bondage shall He ask them
    treble-tale
Keep ye the Law—be swift in all obedience—
  Clear the land of evil, drive the road and bridge
      the ford
    Make ye sure to each his own,
    That he reap where he hath sown,
By the peace among our peoples let men know we serve
      the Lord

THE EARLY HISTORY OF ST. JOHNS

By J. F. Gross

A number of years ago, while driving in the St. Johns Valley with a friend from the State of Louisiana, as we crossed the spring-creek he told me to stop. He got out and asked me if that water was good to drink. I said, "Yes." He asked, "Does it run all the year round?" I said, "Yes, it is August and it never gets any smaller than this." He said, "I would give $10,000 to have that creek run through my plantation." He then went on to say that he owned a tobacco plantation on the flats along the Mississippi river in the State of Louisiana, and that there wasn't a drop of drinking water on the whole plantation except cistern water, and, as a matter of fact, he stated that they brought all their drinking water in bottles from the nearest city. This incident always made me appreciate the spring creeks and brings me to the village of St. Johns.

The village is situated in the Township of Thorold, about two and one half miles north of the village of Fonthill and six or seven miles south westerly from the city of St. Catharines.

The only historical reference I have been able to find regarding the village is on a map published by George R. and G. M. Tremaine, dated 1862, which states that George Brooks is proprietor of the grist and saw mill, R. Collins & Sons proprietors of the Woollen factory and iron foundries, Charles Fell is a merchant, John Wilkinson is proprietor of iron foundries and manufactures stoves, plows and other agricultural implements.

This map gives an illustration of Collins' woollen factory and foundry, which shows a four-storey woollen factory, a large foundry and two large warehouses. Running through the village from Fonthill is a beautiful spring-creek which has its rise in the

village of Fonthill flows the year round and is of sufficient volume and has enough fall for power purposes in a small way

The main street of the village running nearly east and west forms part of the Dundas road a highway on which stage-coaches ran from Fort Erie to Dundas before Hamilton was in existence

The village appears to have reached its height of prosperity about the year 1840, and mills had been erected, supplied by power from the creek as far back as the latter part of the eighteenth century Records in the registry office show and old residents say that at this time there was a Wesleyan-Methodist Church and an Episcopal-Methodist Church there was also a large hotel or roadhouse, there were several large general stores a tannery harness shop, wagon and carriage shop, blacksmith shop one or two saw mills two grist-mills several woollen mills and one or more carding mills.

St Johns was in its prime before Welland was started The building of the Welland Canal feeder which gave the little hamlet of Merrittsville water power was one of the causes of the growth of Merrittsville now Welland and of the decadence of St Johns There is on file in the registry office an old plan prepared by Zenas Fell of an improved highway called the St Johns Fonthill and Merrittsville Plank Road The road was to be constructed of heavy plank ten feet long laid on substantial stringers Part of this road was actually built and is now the highway running north from Aqueduct Street, still commonly known as the Plank Road

The power at that early date was developed by means of overshot water wheels the only style of water wheels at that time in use In those early days more men were employed in the several factories owing to the large amount of hand-work instead of machinery For instance a wagon or buggy would be built complete the wheels iron work—all being turned out by hand

The village at this time had quite a large population The residents appear to have lived comfortably and to have been contented and happy

The Court House in Welland, erected in 1856 was heated with stoves made in St Johns and if the writer is not mistaken one of those stoves is still used for heating purposes in the township hall at Ridgeway in the Township of Bertie

Zenas Fell a land surveyor was one of the early settlers in the village of St Johns Charles Fell one of his sons carried on a general store there for thirty years The Tuckers also carried on a general store in St Johns

Today St Johns may aptly be called The Deserted Village There is one grist-mill still standing but it has been dead for about thirty years The last carding mill later known as the Pitts mill in the west end of the village which though complete with its machinery has not been running for a good many years and was torn down this summer The writer was fortunate enough to obtain a photograph of the old over-shot water wheel just before it was torn down

The population has dwindled to about twenty or thirty people Both churches have been torn down or removed The cemeteries are uncared for The old Zenas Fell homestead which is situated on the south side of the Dundas road or Main Street of the village is being torn down this summer This gentleman s residence which must have been built seventy or eighty years ago has not been occupied for the last ten or twelve years and presented a splendid example of old-time carpentry and masonry The front entrance to the old house the main part of which is still standing though surrounded and grown up with shrubs is handsome and when one considers that all the mouldings sashes and doors were made entirely by hand shows that the carpenters of the old days must have served a long apprenticeship The stairway in the front hall is winding with a walnut rail and light walnut balusters and it would worry many of the craftsmen of today to build it Between the parlor and sitting-room are fireplaces which together with the hearth are built of cut stone with a black wood mantle one fire-place in the parlor and one in the sitting-room and though unoccupied and unlocked a tablet bearing the name Zenas Fell in large raised letters was on the parlor mantle up to a year ago The kitchen of this old homestead is large and has a fire-place with a swinging crane for use in cooking and a smaller brick oven at one side for baking bread cakes &c The kitchen fire-place was so deep that the sides were built in as cupboards or shelves

Nearly everyone has left St Johns Apparently what has happened to St Johns has happened to almost every other small

rural village in the Niagara Peninsula and probably throughout the province

In the old days when the only power was wind and water the early settlers availed themselves of even the smallest water power and St Johns was particularly favored from the fact that the stream there supplied power the year round while many of the streams especially the Twelve-mile creek at Jordan only supplied water through the spring and fall

The early settlers therefore built their mills at the point of the water supply The building of the railways stopped the traffic on the Dundas highway The coming of the steam engine allowed the mill owners and manufacturers to locate their factories at the most convenient point and operate them cheaply by steam as wood the fuel then used was very cheap

It must be remembered that the saw-mills of those old days were not the saw mills of today The saw went up and down the power being supplied to the bottom of a frame large enough for the log to pass through and which the water wheel pulled down and a large wooden spring pulled up It took time to saw a board The writer remembers one of them run by one man He would start the saw cutting at the log and then go away having a string attached to the gate of the waterwheel at one end and to the log carriageway at the other so that when the saw got through the log the carriage would pull the cord drop the gate to the waterwheel which would stop and the old man would come back carry away the board that was cut and re-set it start the mill cutting—and even at that he cut quite a lot of boards in a day and while the saw-millers of today might turn up their noses at the old man's mill he certainly would laugh at some of the logs they try to cut into boards today In those days you did not bring a log to mill that was not fit to make shingles

What prosperity the steam-engine left to St Johns has been absolutely taken away by the development of electrical power and the only hope the writer sees for the future of the village is to develop its natural resources in the way of parks and public playgrounds and as a summer resort One may travel from Nova Scotia to British Columbia and not find more beautiful scenery than in the St Johns-Effingham valley The streams could be controlled

in such a way as to make splendid bathing pools for the children with all the advantages of the Great Lakes without the danger. In the meantime we may say of the St. Johns-Effingham brooks

Men may come and men may go
But I go on forever

THE HISTORY OF THE NIAGARA GORGE

By D D Gross

Many books have been written on the Niagara Gorge and it will only be possible to touch briefly on a few of the most outstanding characteristics of this one of the most wonderful of Nature's masterpieces

The natural beauties of the Niagara River throughout its entire length are less appreciated by those in close proximity than by the thousands of tourists who travel each year from the four corners of the globe to see them

Some time ago I became rather curious as to why and how this river came into existence and into its present formation and I made some investigations the results of which it is the purpose of this article to tell to

To find the origin of this river and gorge we must travel back many thousands of years into the past how many thousands geologists hesitate to say At one time this whole district was covered with a glacier in what is known as the Wisconsin Ice Age This barrier of ice is estimated to have been about 3000 feet thick The Niagara district remained continuously under the burden of the ice not only during the entire time that the front of the ice sheet was retreating from a point about ten miles north of the Ohio River at Cincinnati to Niagara Falls but during an equally long time probably in the period of advancement

Shortly after the retreat of the ice had uncovered the present site of the Niagara Gorge this district was covered with water This condition continued until the further retreat of the ice which was retreating in a north-easterly direction opened an outlet on the northward sloping hills south of Syracuse N Y The result of this new outlet was that the waters in the Lake Ontario basin

were drawn down to a somewhat lower level than the present level of Lake Erie. This completed the separation of Lake Erie from Lake Ontario and reinaugurated the flow of the Niagara River, and Niagara Falls began the work of making the Gorge as the escarpment at Queenston.

In addition to the flow through the Lewiston spillway four other spillways were instituted at the same time—one at Holley, N.Y.; one at Medina, N.Y.; one at Gasport, N.Y.; and the fourth at Lockport. The life of each of these spillways was comparatively short as they were no doubt smaller than the Lewiston spillway which wore its way into the rock much more quickly than the others and has become the only outlet for the waters of the Great Lakes.

The process of gorge-making is interesting. The gorge has been and is being elongated by boring at the base of the Falls where the heavy mass of falling water strikes at the end of its vertical descent. The softer strata are slowly worn away by the impact of the water itself, but the hard capping layer is removed chiefly by undermining until it falls away in huge blocks. The blocks which drop on the caldron at the foot become highly efficient tools for grinding away the shale for no doubt many of them spin around in the violent current like pestle stones in the making of potholes.

When the falls had large volume and full height the thinner hard layers were bored through and removed, but when the height of the falls was reduced as it was in one part of the gorge, or where the water sheet passing over the crest became thin as it did in several places, parts of these beds were not removed and now form benches or terraces. When the volume of the river was relatively small as it was in two sections of the gorge these layers were not bored through by one vertical plunge but in all probability formed separate cataracts one for each hard layer. As Spencer has so noted not this was probably the condition for a time in the older part of the gorge north of the Niagara University. After the relatively narrow whole section of the gorge had been made by the small natural the rush of the volume of the river through these sections deepened them still further by the slower and very different process of minute or rapids erosion. The deepening of the old narrow gorge south of the Niagara University has been substantially completed in this way. That of the gorge whirlpool rapids is now in progress.

Of very great importance in understanding the history of the gorge is the relation of the Great Lakes to the history of the Niagara River which with the exception of a few small streams furnishes the whole source of the supply of water for the River

Since Niagara River first began the Great Lakes have passed through five different stages each stage having a different outlet than that of the preceding stage and the volume of water discharged from the Niagara River varied with each change

The first stage is known as the Early Lake Algonquin Stage — This lake occupied the south half of the Lake Huron basin and received a considerable amount of water from the lakes in the Georgian Bay district and Lake Simcoe district At this time the ice barrier covered Lake Huron from side to side and no water was received from the Lake Michigan or Lake Superior regions The volume of discharge was probably equal to the present discharge due to the tributaries coming in directly from the ice sheet It was during this period that the first or oldest section known as the Lewiston Branch Gorge was created This gorge extends about 2000 feet south from the mouth of the gorge The average top width is about 1500 feet its depth is about 500 feet to the bottom of the river which is 120 to 150 feet deep and 600 feet wide

The second stage of the Great Lakes is known as the Lake Algonquin Kirkfield Stage This lake occupied the basins of Lakes Superior Michigan and Huron in addition to some low-lying lands bordering upon them It did not attain its full extent in this stage however because the ice barrier still occupied large areas lying at its northern side so bes des carrying the full discharge of the upper Great Lakes Lake Algonquin at this time received a large flow of water directly from the ice sheet and its total discharge was probably greater than the present volume of the St Clair River The outlet was Kirkfield Ontario down the valley of the Trent river to glacial Lake Iroquois which was in part a contemporary of Lake Algonquin Lake Iroquois occupied the Lake Ontario basin and extended to the foot of the escarpment at Queenston During this period the second section of old narrow gorge was formed This gorge extends from the south end of the first section to the bend at Niagara University a distance of about 1 1-8 mile the top width is about 1200 feet the depth to the bot-

tion of the river is nearly 400 feet the river is about 500 feet broad 60 to 70 feet deep and quite rapid here The flow of the Niagara River at this time consisted only of the discharge of Lake Erie or about 1/5 per cent of its present volume

The third period or stage of the Great Lakes is called the Lake Algonquin-Port Huron Stage The extent of Lake Algonquin in this period was about the same as the earlier stage There was a general uplift of northern lands which shifted the outlet from Kirkfield to Port Huron This same uplift raised considerable areas above the level of the lake but a greater area was added by the gradual retreat of the ice sheet In the early part of this period Lake Algonquin received a considerable inflow directly from the ice sheet but in the latter part the ice sheet had become so small that its contributions were insignificant In the first half of this period there was a large discharge at Chicago as well as at Port Huron but in spite of this the flow at Port Huron was slightly larger than the present river During the first portion of the period the flow of the river was slightly larger than at present and in the second half a trifle less on account of the Chicago discharge and the Niagara River was affected correspondingly

It was during this period that the Lower Great Gorge was formed This gorge extends from the bend below Niagara University where the gorge widens to the upper side of the Eddy Basin Its width between the cliff lines from the bend south above 1000 feet averages more than 1600 feet and at the widest is about 1825 feet Above the north end of Watergreen Terrace the width is from 1300 to 1500 The extra width is due partly to the augmented volume of the river and partly to the wide flat floor above the falls which caused the water sheet to be spread to unusual width During this period geological changes caused Lake Iroquois to be about 125 feet higher than the present level of Lake Ontario and at a later time in the period the lake again receded

These changes occurred when the falls was at the head of Porter's Flats There is a reef which produces the sharp rapids at the outlet of the Whirlpool which owes its origin to the breaking away of the east wall of the Whirlpool before the vertical fall had time to carve out the sand stone at its base then continuing their work the falls cut out the Eddy Basin before the volume of the river was reduced

The fourth stage of the Great Lakes is known as the Nipissing Great Lakes. It was caused by the withdrawal of the ice sheet from the Ottawa Valley. These lakes consisted of the three upper lake basins and their area was only slightly larger than the present lakes. The outlet during this stage was east from the northern parts of the Georgian Bay region into Lake Nipissing and thence to North Bay, Ontario. The scouring effects of the outlet river was well marked on the valleys of the Mattawa and Ottawa rivers and indicate a river having the same volume as that of the present St. Clair River. During this period the gorge of the Whirlpool Rapids was formed. This gorge is about three-quarters of a mile long and extends from the upper side of the eddy basin to the head of the gorge just above the railway bridges. The average gorge width is about 750 feet, the average width at the water line is about 250 feet. During the formation of this gorge the river carried again only the discharge of Lake Erie.

The fifth stage of the Great Lakes is the Present Great Lakes Stage. The continued uplift of land in the north raised the outlet at North Bay and again sent the discharge of the Upper Lakes to Port Huron. In transition it is probable that both outlets were active at once but this apparently did not last long. The change of outlet to Port Huron brought the Nipissing great lakes to an end and inaugurated the present system which has continued ever since.

The gorge created and in process of creation runs from just above the railroad bridge to the Horseshoe Falls. It is about two and one-quarter miles long and its average width north of the American Falls is about 1350 feet, widening opposite the American Falls to 1600 feet. The depth of the river is about 180 to 200 feet.

It is interesting to note a few of the characteristics of the Whirlpool. It has long been recognized that the rock basin of the Whirlpool is older than the remainder of the present Niagara Gorge, and has a very different history. It is a buried drift-filled gorge of the interglacial age. The walls surrounding it on the east and west sides are rock cliffs but on the north and northwest it lies the entire wall from the top down to an undetermined depth, is composed of sand and gravel. South of the village of St. Davids there is a strongly marked re-entrant in the front of the escarpment,

the head of which shows no rock for about a mile but is a steep and much gullied slope of drift One cannot resist the impression that this buried gorge was made by an inter-glacial Niagara substantially identical in volume with the present Niagara Falls They came the last ice sheet completely filling the old gorge which has been uncovered by the present cataract

Various estimates have been made by geologists as to the age of the Falls In 1841 Lyell estimated the age of the Falls to be 35 000 years Surveys made since then afford some basis for calculation In 1894 Spencer calculated the total duration to be 32,000 years but in a later report in 1907 he makes it 35 000 years The present rate of recession of the Horseshoe Falls is estimated to be 5 5 feet annually while that of the American Falls is only 2 feet for the same period This is accounted for by the fact that approximately 95 per cent of the water flows over the Horseshoe Falls leaving only a small portion for the American Falls The average depth of water on the American Falls is about 18 inches with a maximum depth of 3 5 feet while the estimates of depth of the Horseshoe Falls run from an average depth of 6 feet to a maximum depth of 20 to 25 feet

In closing I wish to pay tribute to those geologists and engineers whose investigations and efforts have put the information I have just given at our disposal They are E M Kindle and Frank B Taylor of the United States Geological Department also J W Spencer who has written a book entitled 'The Falls of Niagara

GOVERNOR SIMCOE VISITS WELLAND

By Ernest Green, Ottawa

It is perhaps not generally known that Colonel John Graves Simcoe, first Lieutenant-Governor of the Province of Upper Canada, once visited the site of the future city of Welland. The presence here of the representative of His Majesty King George III was made the occasion of no special ceremony or celebration—chiefly because there was no one here at all to raise the customary flag, fire the usual salute or bore His Excellency with an address of welcome. The banks of the Welland River (then newly so christened by Simcoe himself) were clothed with unbroken virgin forest.

Simcoe, on his part, probably paid no particular attention to the spot where the future county town was to stand. Perhaps he noted that there was a big bend in the stream just here, but we cannot suppose that he had any vision of a canal and aqueduct of a team of industries or of a populous community with a court house in its midst. In Simcoe's mind, court house would merely recall the vexing problem of how the embryonic town of New Sark was to be provided with judicial buildings of sufficient size to serve the whole country between the Trent and Long Point.

Simcoe's mode of approaching Welland's site was unique. No Governor of later days has come to us in the same way nor from the same direction. Simcoe came down the Welland River in a canoe.

It was in the early autumn of 1795. The head of the new province was vigorously carrying on his exploratory work of all the region lying north of York (Toronto) and westward to the Detroit frontier. The summer had been intensely hot and the humidity of the forest-clad lowlands and the lake made Navy Hall an uncomfortable dwelling-place, so the Simcoes had been board

ing since the twelfth of August at the house of Mrs Tice widow of Major Gilbert Tice, which was on the Portage Road in Stamford, not far from the present Half-way House. On the 25th Simcoe, though in poor health, planned an exploratory trip to Long Point and the Grand River (which he had named the Ouse) and his wife and little son accompanied him to Fort Chippawa where they passed the night and on to Fort Erie the next day. The Governor having an acute attack enroute which compelled him to rest in a farm house for some time.

At Fort Erie they lodged at a farm house two miles back of the post. On the 29th Mrs. Simcoe and little Francis started back to Stamford while her husband set off up the lake. Of his adventures during the next two weeks Mrs. Simcoe's Diary gives this brief account:

> Sat. 12th Sept.—The Governor returned and is far from well. He was pleased with Long Point which he called Charlotteville. The banks on the lake 150 feet high on the shore grew weeping willows covered with vines he gathered some grapes already sweet. He returned up the Grand River from thence crossed a short portage into the Welland which he descended to Fort Chippawa. He went part of the journey on horseback, and was much annoyed by passing wasps nests. The wasps stung the horses terribly.

So there you have all that we know about it. It is highly unpardonable that the Governor feeble of health weary from an arduous journey through the wilderness and tormented by wasp stings would pause to spend another night under canvas when within ten miles of Fort Chippawa and fourteen from his wife and son. He set out home on September 12th and we may assume with confidence that it was on that day he was paddled by the site of future Welland. He was the first man of note known to have visited this spot.

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WELLAND COUNTY HISTORICAL SOCIETY

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Four papers read to the society are not included for the reason that they are to be issued in the forthcoming publication of the 'Papers and Records of the Ontario Historical Society' and will thus be available to the public

BIBLIOGRAPHY OF THE FENIAN RAID

Somerville—*Narrative of the Fenian Invasion of Canada*

Campbell—*The Fenian Invasions of Canada of 1866 and 1870*

Dent—*Last Forty Years, Correspondence Relating to the Fenian Invasion, Ottawa, 1869*

Trials of the Fenian Prisoners at Toronto Who Were Captured at Fort Erie, C W , in June, 1866 Ed by George R Gregg and E P Roden

McMicken—*Fenian Raid on Manitoba* (Manitoba Hist and Sc Society), 1888

Hannay—*History of New Brunswick*

Macdonald—*Troublous Times in Canada*

Denison—*Soldiering in Canada and The Fenian Raid on Fort Erie*

Stephen Beatty—*Fenian Raid, 1866*, St Catharines, 1910

PUBLICATIONS OF
THE WELLAND COUNTY HISTORICAL SOCIETY

Vol I , 1924—The Centenary of the Welland Canal

Vol II , 1926—Papers and Records

THE FENIAN RAID OF 1866

By General E A Cruikshank, LL.D, F R S C,
F R Hist S

After the lapse of nearly sixty years the Fenian invasion of Canada in 1866 seems a supremely foolish adventure, doomed to inevitable failure, and it is difficult to recall the alarm, excitement, and bitter controversies which followed Few lives were lost and little damage was done to property, but some useful lessons may yet be drawn from the events of that time

The Fenian conspiracy grew out of the Young Ireland agitation of 1848 James Stephens its acknowledged founder had been implicated in the abortive insurrection organized by William Smith O Brien and was slightly wounded in an encounter with the Constabulary but escaped to France where he lived quietly for seven or eight years Some time in 1857 he was solicited by John O Mahony and other fellow conspirators who had taken refuge in the United States and prospered to undertake the management of a new revolutionary movement in Ireland for the support of which they promised to supply all the necessary money Indeed, one of these fugitives had in fact written enthusiastically from New York not very long after his arrival in that city declaring that "we have the long arm of the lever over here" This was the poet and orator, Thomas D Arcy Magee, who soon went to Canada and entered political life, but in the course of a few years saw reason to change his opinions materially Stephens, who at the time needed money badly, went to Ireland and set to work with a will during the following year, when he began to form secret military societies or associations, consisting generally of from fifty to one hundred and fifty members each, to which he gave the name of Fenian Circles Tradition relates that the ancient militia of

Ireland were styled "Fenians." Sir Walter Scott in the "Antiquary" refers to "the bare-armed Fenians," and the conspirators thought that they had hit upon a good name at last. The chief of each "circle" was known as its "centre." The officers next in rank were designated by the letters, "A, B, C, &c." All authority for the time being was vested in the "centre" and in the event of his death or absence, his next subordinate succeeded automatically to his place and authority. The ordinary members took a solemn oath to obey orders only and knew scarcely anything of the plans of their leaders. By such precautions it was hoped that it would not be possible for them to betray or reveal their projects prematurely as had so often been the case in the past. Military exercises were frequently practiced in lonely places and so large a proportion of the militia regiments were known to be enrolled in these "circles" that the government deemed it expedient to disband them in several of the southern and western counties. The Fenian organization spread rapidly to the United States, Canada and Australia. In the City of New York particularly it soon became very strong and practically gained control of its municipal government. A mayor of the city distinguished himself by ordering the green flag, bearing the harp without the crown, to be flown over the city hall on St. Patrick's Day, and attired himself in green clothing on that anniversary to proclaim his sympathy with the Fenian movement in the most significant manner. Large sums of money were collected for the promotion of the conspiracy amounting, it was affirmed, to more than a million of dollars within seven years in the United States alone, of which, however, Stephens admitted that he had received not more than $150,000, and it was presumed that the balance had been expended by the self appointed leaders in that country to support themselves in luxurious indolence.

Irishmen were encouraged to join the Federal army in the civil war to acquire military knowledge and experience and many exclusively Irish regiments were recruited. One of these, the 69th New York, was commanded by Michael Corcoran, an active Fenian, who had been a policeman but later, became a saloon-keeper in the city of New York. Corcoran was taken prisoner at the first battle of Bull Run and, after being exchanged, was promoted to command a brigade. Thomas Francis Meagher, popularly known

to the rebellion of 48 as Meagher of the sword also commanded a distinctively Irish Brigade Under such favourable auspices Fenianism naturally flourished in the United States and spread through the states of the North

The controversy with Great Britain caused by the detention of the *Trent* and the arrest of the Confederate envoys on board was regarded by the Fenian leaders as giving them a favourable opportunity for beginning a public demonstration and a meeting was held in the Rotunda in Dublin which was well attended and resolutions of sympathy with the United States were adopted

In 1862, Stephens reported to his colleagues that fifty thousand men had been enrolled in Ireland and the funeral of Terence Bellew McManus one of the leading insurgents in 48 who had died in California, but was brought back to Cork for burial, was made the excuse for another immense popular demonstration Next year he began the publication of a newspaper called the Irish People which soon obtained a wide circulation A provisional government had already been organized with offices in Union Square New York, and in the winter of 1863-4, a general convention was held in Chicago, at which Colonel John O Mahony was elected President of the Irish Republican Brotherhood He had attended Trinity College, Dublin, and was a fluent and effective speaker Like Stephens Meagher, McGee and others he had been associated with Smith O Brien in the rising of 48 His military rank was derived from his temporary command of a regiment of New York volunteeers in the civil war Subsequently an Irish Fair was organized in Chicago, which Stephens visited and was welcomed with boisterous enthusiasm as the Chief Organizer of the Irish Republic An official report presented to him at this time stated that 613 Fenian circles had been formed in America, eighty of which were located in the British provinces

About the same time O Mahony visited Montreal and was entertained at a dinner when violently seditious speeches were warmly applauded This provoked an open letter from McGee, then a member of parliament for one of the divisions of the city and lately President of the Council in Sandfield Macdonald's cabinet It was addressed to the Irishmen of Montreal warning them to have nothing to do with American agitators and Fenianism, which

he described as "a mere will of the wisp and a delusion." O Mahony promptly retorted by denouncing McGee as "a Judas" and a "traitor" to the professions of his youth, to which McGee rejoined by a scornful reference to O Mahony as "a crackbrained enthusiast who has already been twice confined in a lunatic asylum."[11]

A second large convention of Fenians was held at Cincinnati in January, 1865, which was reported to have been attended by 1700 delegates. A constitution for an Irish Republic was formally adopted. O Mahony was re-elected President and the convention then proceeded to elect a Senate and Secretaries of State, War, and Finance. An issue of government bonds was authorized and a military council was appointed, of which Brigadier General McMorrty of the United States Volunteers was named as chairman. In April of that year the civil war was ended and within a short time nearly a million of soldiers were discharged from military employment. The labour market was at once greatly congested. Two confidential agents, of whom one was P. J. Meehan, editor of the "Irish World" of New York, were sent to Ireland to arrange with Stephens for an immediate insurrection, in which they expected to obtain the assistance of many of these disbanded soldiers. Some of the Fenian leaders openly boasted that their officers were on their way to Ireland to raise an army to achieve its independence and asserted that two hundred thousand Irishmen had fought in the Federal armies, of whom a large number were sworn Fenians who could be relied on to assist them. It was observed that almost every ship arriving in the Irish ports from the United States landed a number of mysterious strangers of a military appearance, who quietly made their way inland. But the government had reliable sources of information from which they learned all that was going on. A well informed Irish writer, who cannot be suspected of any unfriendly bias, relates that "every considerable gathering of Fenians had among its members at least one person who generally professed a yet fiercer devotion to the cause than any of the rest and who was in the habit of carrying to Dublin Castle every night his official report of what his Fenian colleagues were doing." Be that as it may, soon after his arrival Meehan lost an important letter addressed by O Mahony to Stephens as "chief organizer" which soon came into the hands of the police.

On the night of September 15 the office of the Irish People was raided, its editors were arrested, and many incriminating documents were seized Stephens evaded arrest until November 11, when he was taken at his lodgings in the suburbs of Dublin Two weeks later it was announced that he had escaped from Richmond prison and after remaining in hiding for several weeks, he got away to France

Meanwhile the organization in America had been daily gaining strength and its leaders were literally forced to undertake some enterprise to satisfy the clamor of the rank and file Ireland was far away and strongly garrisoned To promote an insurrection was a difficult and dangerous affair The British Provinces were close at hand and comparatively defenceless Many of them inhabitants were supposed to be discontented with their government and it was confidently anticipated that, with the possible exception of the fortress of Quebec the whole of Canada could be taken in a single short and almost bloodless campaign The Fenian circle in Toronto and Montreal were reported to be particularly strong and zealous McDermott, the 'centre' of a New York circle announced that he had attended an open air meeting of Fenians in Queen's Park, Toronto on the evening of 5 November 1864, at which rebellion had been openly advocated and that the authorities had not dared to interfere because they knew that 800 men in the city were fully armed and in readiness to protect the speakers If five thousand men invaded western Canada, he declared the people would rise in a body and demand annexation to the United States A large number of Fenians soon pronounced themselves in favour of such an invasion and O Mahony incurred much unpopularity by refusing to sanction it at once Finally when he undertook to place the bonds of the Irish Republic on the market he was summarily deposed by the Senate and Colonel William R Roberts, who was known to favour it, was elected in his place

The new President lost no time in announcing his policy Let us march on the frontiers, he said The Government of Canada is imbecile Ottawa, the capital city, can easily be taken by a handful of Fenians, who can throw up works and hold it against any force the Canadian Government is prepared to send

against them until reinforced What a thrilling effect such an achievement would have throughout Europe! We must go to Canada and fight it out there The war has commenced in Ireland, the Fenians must follow it up here and hit England in a tender spot Colonel Sweeney, his Secretary of War, published a circular urging an effective military organization and promising deeds, not words

But O Mahony was still powerful, and at the general convention, held in January 1866, he was triumphantly re-elected President by a great majority over Roberts His rival, however, refused to submit to this decision and proceeded to make a tour of the cities on the great lakes He addressed large and enthusiastic gatherings in Buffalo, Cleveland, Detroit, and Chicago, while Sweeney his chief lieutenant had a like favourable reception at meetings held in New York Troy, Burlington, Philadelphia, and St Louis They announced that subscriptions were pouring in at the rate of $15,000 a day and that the time for action was near It was stated that three regiments were drilling every night at Buffalo and that arms and munitions were being rapidly accumulated in that city for their use

Their grandiose plan of campaign still sounds impressive

Detroit, Rochester, Plattsburg, and Portland are appointed rendezvous for the troops and the forces at Detroit and Rochester are to attack Hamilton and London while other forces are to move from Ogdensburg and Plattsburg upon Montreal When the Canadian borders are once crossed, bases of operation will be established in the enemy's country so that international quarrels with Washington may be avoided It is expected to have a million and a half dollars of ready cash to give transportation for thirty thousand men for one month Of this force eight thousand will carry the line of the Grand Trunk west of Hamilton, while five thousand will cross from Rochester to Cobourg prepared to move east or west either to assist the three thousand who will cross at Wolfe Island to Kingston or take part with the western detachment in capturing Toronto This it is thought will occupy two weeks Thus entrenched securely in Upper Canada, holding all the lines of the Grand Trunk Railway with sufficient rolling stock secured to control the said lines, the Fenians hope to attract to their colors fifty thousand American Irishmen and equip a navy on Lakes Huron Erie and Ontario This having been accomplished thirty thousand men, under General Sweeney, will move

down the St. Lawrence upon Kingston, simultaneously with ten thousand by the line of Chambly, and these will converge upon Montreal."

It was at the same time asserted that an officer of high rank in the army of the United States had offered to lead the army of invasion and the name of the distinguished Confederate, General Fitz-Hugh Lee, was also mentioned in that connection.

Such an extensive scheme of aggression naturally caused much alarm in Canada as there could no longer be any doubt of the formidable character of the organization. For nearly a year three provisional battalions of volunteer infantry had been stationed in small detachments at posts along the Detroit, Niagara, and St. Lawrence Rivers. On the 7th of March, 1866, the Executive Council of Canada decided to call into active service for an indefinite period an additional force of ten thousand volunteers, which was accordingly done that day by telegraph and responded to with gratifying alacrity.

By that time O'Mahony had been induced to modify his views sufficiently to sanction an expedition to take possession of the island of Campo Bello in Passamaquoddy Bay, which, being then claimed by both Great Britain and the United States, he professed to consider as neutral territory and might be occupied by a Fenian force as a base for future operations without provoking hostilities with either power. The treasurer of his wing of the Brotherhood, B. Doran Killian, was put in charge of this enterprise, which resulted in a complete and ridiculous failure, attended with much privation and suffering among his deluded followers. This fizzle, as it was called by the newspapers, had the effect of lulling the apprehensions of the Canadian ministry, who were at the time seized by a sudden fit of economy, and by an order of 21 April, 1866, the whole of the volunteer force, lately embodied, was relieved from duty and the Militia Department even refused to approve the employment of a guard for the field guns of the Welland Battery, which were in consequence removed to Hamilton for safety.

Hon. T. D. McGee continued fearlessly to assail with ridicule the farcical Irish Republic of Manhattan Island with an escaped lunatic for its President and its Senate, composed of a shoemaker from Massachusetts, a dealer in second-hand goods from New

York, a plumber from Rhode Island, a candy dealer from Illinois, and such like men from other States This Billingsgate beldame, reeling and dishevelled from the purlieus of New York, with blasphemy on her lips and all uncleanliness in her breast,' he exclaimed with florid rhetoric, 'this shameless impostor, I resist with scorn and detestation' About the same time O Mahony announced that he had received letters from Canadian 'circles,' protesting against any Fenian invasion of Canada

On May 10, James Stephens arrived at New York from Paris O Mahony at once tendered him his resignation of his office as President but Roberts declined to follow his example On the 15th an immense outdoor meeting was held at Jones's Wood, at which more than sixty Fenian circles proudly paraded with bands and banners Among the celebrities who came there to welcome the renowned 'Chief Organizer' were Major-General Joseph Hooker, formerly in command of the Federal Army of the Potomac, Brigadier-General Ruggles and Colonel Reilly of the United States regular army Stephens told his hearers that the 'circles' in Ireland numbered two hundred thousand members, of whom fifty thousand were well trained in military exercises

For several years both the British and Canadian governments had employed secret agents to collect information in various parts of the United States, one of whom, it is now known, was the noted Major Le Caron, who constantly made full reports The movements of the Fenians could not elude the observation of enterprising correspondents of the daily newspapers On May 27 a despatch from Nashville in Tennessee, dated the day before was published in many papers in the United States, announcing that more than a thousand dollars had been invested that day in Fenian bonds and that several parties had left the city for the northern frontier On May 29 the *Cincinnati Commercial* said 'There is a movement of Fenians now going on Quite a number of them left the city yesterday bound for Canada Large shipments of arms have been made northward within a few days There is an opinion that an extensive raid is to be made upon Canada Movements of men and transportation of arms have been in progress for several days with a degree of secrecy that indicates business' On the same day a despatch sent out from Cleveland, Ohio, stated

that "Three or four hundred Fenians, partially armed and carrying colors, officered by men with sidearms, passed here last night They were orderly and quiet and claimed to be marching to California to work on the railroads" Commenting on these reports in an editorial on May 30, the *Buffalo Courier* said that the knowing ones in the "Brotherhood" there, laughed at them and declared that the whole story was a hoax, but added that they were "a shrewd set" and "people might wake up some bright morning to find that Canada had been invaded or captured, but the Canadian Johnnie Bulls are not frightened this time and the frontier does not bristle with bayonets" On the same morning the *New York Herald* announced that Mayor Wells of Buffalo had telegraphed to the Mayor of Hamilton in Canada, that six hundred Fenians had left Cleveland for Buffalo, and that the spare rolling stock of the Great Western Railway was being sent away from Hamilton in consequence The manager of that railway, however, made a written denial of that statement as soon as it was brought to his notice In the course of the last day of May many inhabitants of Buffalo observed that considerable parties of strangers, whom they supposed to be Fenians, had arrived in that city on the two preceding days They had come in bands or parties of varying numbers, mainly from the south and west and kept together as they strolled about the streets When questioned, some of them stated that they were going to Canada to look for work on the railroads, while others said they were discharged soldiers on their way to California, which seemed scarcely credible as it was known that they had come from Cleveland and Cincinnati or even from Indianapolis and Chicago Mr H W Hemans the British Consul, telegraphed this information that afternoon to Major-General Napier, who was in command of the First Military District of Canada, having his headquarters at Toronto

At least one Fenian regiment designated as the "Buffalo 7th Regiment, Irish Army of Liberation," had been organized in that city and was formally presented with a battle-flag by a group of women who sympathized with "the cause" early in May There is little doubt that the parties, who came from a distance, were warmly welcomed and well taken care of by their friends living in Buffalo, who were many and some of them prosperous and influen-

tial in politics. The *Buffalo Express*, whose proprietor was of English birth, had published accounts with large headlines, of the assembling of a large body of Fenians in Buffalo, which were consistently ignored or even ridiculed by its rival. *The Commercial Advertiser*, recognized as the local organ of the Federal Government. On the streets of Fort Erie that afternoon and evening, it was a subject of common talk that the Fenians intended to cross that night, but as this had been reported so often before, few people believed it. The *Morning Courier*, which bears the date of Friday, June 1, and which must have left the press before three o'clock a.m., in an article probably written about midnight, remarked that it had purposely abstained from making any reference before to the arrival of a considerable body of Fenians in the city in the expectation that their intentions would soon be more fully known, but it was then ascertained that 300 had come in on the preceding Wednesday and 200 more on Thursday, who were then quartered in the Dudley and Townsend Halls near the foot of Main Street close to the harbour. These men had little to say as to their destination except that they were looking for work. The collector of customs for the port of Buffalo by a public advertisement printed in the same paper forbade the clearance of any ship or boat between 9 a.m. and 4 p.m. without a special inspection by the customs officials and absolutely prohibited the departure of any vessel from the harbour between 4 p.m. and 9 a.m., until further orders were received from the Treasury Department. The steam revenue cutter, Michigan had arrived from Erie to assist in the enforcement of these regulations. Telegrams received in the night announced that other bodies of Fenians were assembling near Malone on the frontier of Lower Canada and at Detroit. When this paper was distributed a landing had already been made in Canada by the Fenians assembled in Buffalo, which was duly reported in a second edition by a reporter who witnessed their embarkation. The *Express* had been less reticent and printed fuller reports of Fenian movements.

It is certain that the Canadian military and civil authorities in Canada had received reliable information of the contemplated raid in ample time to send a sufficient force to the Niagara to have opposed an invasion. But, apparently influenced by motives of

false economy, they contented themselves with warning the commanding officers of units of the volunteer militia to be in readiness for active service

In fact, Colonel John O'Neill commanding the 23th Fenian Regiment, had entrained that body of men at Nashville on May 27 At Louisville, Kentucky, and at Indianapolis, his force was considerably increased by other parties and on the evening of the 28th it arrived at Cleveland where he expected to find a vessel waiting to transport it across Lake Erie to Canada, but a telegram ordered him to go on by rail to Buffalo That night he again entrained with 342 men and reached Buffalo early next morning At the Union Ironworks, a mile from the station, the train was stopped and the men were marched into the city in small parties to escape observation A large Fenian mass meeting had been held in St James's Hall the night before, at which it was said that large maps of Canada were exhibited and the enthusiasm of the audience was stimulated by a general invitation to come forward and select their farms now The excitement and ardour of the local circles was at its highest point A large quantity of arms and accoutrements had been shipped to Patrick O'Day, a local auctioneer and leading Fenian, who advertised an immense sale of military stores to begin on the following Friday, June 1, at 10 a m A reportet, who visited his auction rooms on Pearl Street found them crammed with unopened chests Early in the evening of May 31, about 1500 men assembled at the Fenian drill halls and other meeting places near the docks, many of them already armed and equipped, but before long they marched off again in bands of about fifty men in different directions Their first plan had been to embark in the harbour but the orders issued by the Collector blocked this Another proposal to seize the steam car-ferry of the Buffalo and Lake Huron Railway at its dock could not be carried out because that boat had been moored for the night on the Canadian side of the river Instead of returning to their quarters or homes for the night as was expected, the various detachments of Fenians marched quickly and silently by several parallel routes to the suburbs of Lower Black Rock, five miles distant, where nine wagons loaded with arms and equipments were waiting at the canal-bridge and two steam tugs and four canal boats lay in readiness at Peart's

wharf to convey them across the river. Brigadier-General Lynch had been assigned to command the expedition but as he failed to appear, Colonel O'Neill promptly took charge as the senior officer present.

Born in County Cavan in 1834, O'Neill had come to the United States when a mere child and had served for eight years in the regular and the volunteer cavalry, rising by merit from the ranks to be a captain and had been recommended for further promotion when the civil war came to an end. In Sherman's "Great March," he had acted under the command of Kilpatrick and learned the art of gaining intelligence and subsisting troops on a hostile country as practised by that able and ruthless leader. After leaving the army he had conducted a pension agency in Nashville by which he kept in close touch with many disbanded soldiers in that region. In person, he was of medium height, spare, and well built, having keen aquiline features, a light moustache and close-cut hair. His appearance was alert and soldierly and his manner quiet and courteous. He seems to have been a sincere and unselfish enthusiast. His defence of the raid was brief and frank. "You recognize the English Government as your government and the English flag as your flag. We desire to destroy both. Hence our only cause of quarrel with you. If we had been able we would not have hesitated to kill every soldier who was ready to fight for England." As a soldier he was brave, quick in coming to a decision, and resourceful.

The brigade of which he then assumed the command consisted of his own regiment, the 13th Tennessee from Nashville, the 17th Kentucky, Colonel Owen Starr, from Louisville, the 18th Ohio, Colonel John Grace, from Cleveland, the 7th New York, Colonel John Hoey, from Buffalo, and an independent company from Terre Haute, Indiana, commanded by Captain Hugh Haggerty. O'Neill states its entire strength at about 800, but other estimates carry it as high as 1,500 and even 2,000. Most of the officers and many others were veteran soldiers, inured to war by long experience, accustomed to endure privations and fatigue and quite capable of taking care of themselves in the field. Nearly all the officers wore the blue uniform of the Federal Army, but few of the men had any military clothing or any distinguishing dress except that many of

them were wearing green shirts and black belts Each unit carried a large green silk battle flag with a gold harp or shamrock embroidered or painted on it The flag borne by the 7th Regiment, considerably tattered, is now preserved in the Museum of the Buffalo Historical Society

About midnight the advance guard, commanded by Colonel Starr, who had also served under Kilpatrick, crossed over in a canal-boat, towed by one of the tugs and landed quietly at Freeburg's wharf in the Township of Bertie, less than two miles below the village of Fort Erie At 3 15 a m the remainder, with the exception of about one hundred for whom there was no room, embarked in the four canal boats, which were then towed across by both tugs It is also stated that about forty men, completely clothed in blue Federal uniforms, came down the river in row-boats from Buffalo and joined O Neill in the early morning

The theatre of the ensuing operations may be roughly described as lying within an equilateral triangle bounded on one side by Lake Erie and on another by the Niagara River, of which the site of old Fort Erie is the apex and the base is formed by a line drawn from Chippawa on the river to Port Colborne on the lake, the distance from any one of these points to any other being nearly sixteen miles as the crow flies The International Bridge had not been built and the town of Bridgeburg was not in existence the ground it now occupies being farm land under cultivation with about half a dozen dwellings upon it fronting the river At Fort Erie Village was stationed a lookout party of five or six men of the Royal Canadian Rifles under a non commissioned officer, who were unarmed and wore civilian clothing Their duty seems to have been to watch for deserters from the regular British regiments who might attempt to make their escape to the United States These men were all veterans of long service and approved good conduct The river between Fort Erie and Black Rock is a thousand yards in width and flows at the rate of six miles an hour A ferry between Fort Erie Village and the suburb of Buffalo then known as Black Rock was carried on in daylight hours by a steamer of about one hundred tons burden which landed and embarked its passengers and carriages at a wharf exactly opposite the Fort Erie post office, on which stood a small wooden building used as a cus-

toll-house. This vessel burned wood in its furnace and long piles of cordwood lined each side of the gangway across the wharf. Another ferry for passengers only was casually conducted by row-boats between Freebury's wharf and Pratt's wharf at Lower Black Rock. The only stream flowing into Lake Erie between Fort Erie and Port Colborne worth mention is the Six Mile Creek, about that distance up the lake, which in the summer is insignificant in size. Falling into the Niagara are Frenchman's Creek, a few hundred yards below Freebury's wharf, in dry weather fordable a quarter of a mile from its mouth, Miller's Creek of about the same size, three miles further down, and Black Creek, six miles above, which was unfordable as far up as Chippawa, the small village of Stevensville on its west branch four miles from its mouth. A road from Fort Erie, now known as the Niagara Boulevard, followed the river closely all the way to Chippawa. It was very narrow in a few places and liable to obstruction by the removal of the wooden bridges over these creeks.

The Township of Bertie, out of which the village of Fort Erie had been incorporated nine years before, originally contained 38,000 acres, and with the exception of the irregular frontage on the river and lake, was laid out in 10 blocks of forty by fifty chains, with a road allowance on all sides of each block. It extended westward along Lake Erie for ten miles and its river front, being very winding, was about nine miles long. Twelve hundred acres had been separated from this township to form the corporation of Fort Erie, having a shore line of about three miles on lake and river, and extending from the river due westward for more than half a mile. The main village contained perhaps six hundred inhabitants, and most of the houses, shops, and taverns of which it consisted were built on the west side of the river road, facing the river. Half a dozen other streets at right angles to this main street had been opened on an irregular alluvial flat, elevated only a few feet above the ordinary level of the river, about a mile in extreme length by not more than three hundred yards in width at its widest part. Each of these streets had a few scattered houses. With the exception of two large brick dwellings, all the buildings were constructed of wood. A railway embankment extended along the river front for about half a mile from the northern end of the village

outside of which were three good-sized wharves and a few petty boat-houses. Behind the village rose abruptly a clay bluff, the ancient bank of the river, some forty feet in height. On it stood one good brick residence and some distance back a small negro settlement formed of small wooden cottages.

Three parallel clay roads, half a mile apart, named the Garrison, Bertie, and Gilmore roads, led due westward from Fort Erie. Another, a mile further down, began on the bank of the river near Freebury's wharf, and was generally known as the Bowen road from a family of that name living near it. They passed through a gently undulating and thinly wooded country, mostly well cultivated with crops of grain and grass, rising gradually until the Limestone Ridge was gained. This natural elevation begins near the shore of Lake Erie at Point Abino and sweeps around in a northeasterly direction, until within a mile of the Niagara River when it turns sharply eastward. Along its western margin ran a natural road, first upon a ridge of gravel and then over a bare shelf of limestone rock, which in early days became a much travelled highway between lake and river, being passable at all seasons of the year. The shallow but well sheltered bay in lee of the high sand hills of Point Abino was the only anchorage at the lower end of Lake Erie which was protected from the prevailing southwest gales and the small sailing vessels employed in lake navigation at that time often disembarked their lading of bales of furs and barrels of potash at this haven. Those goods were conveyed in wagons or sleighs to the mouth of Miller's Creek where they were shipped in river-boats to Chippawa. Their return cargoes of manufactured articles were occasionally brought overland by the same route. By this road too, the boats were carried secretly with which Captain Dobbs and his seamen performed a notable exploit off Fort Erie in August, 1814.

On its western side the ridge descends, sometimes abruptly, forty or fifty feet into a broad and fertile valley through which flows the eastern branch of Black Creek which rises in a small marsh close to the shore of Lake Erie.

Fort Erie Village was connected by a recently constructed railway with Chippawa and Niagara, running fairly close to the bank of Niagara River and crossing the several creeks, flowing into it

near their mouths by wooden bridges. Another railway, the Buffalo, Brantford, and Lake Huron, ran westward from a dock in the corporation of Fort Erie, about a mile south of the village proper and a quarter of a mile north of the ruins of the fort. This line crossed Six Mile Creek on a wooden bridge and had its first station and siding at Ridgeway on the Limestone Ridge, where there was a village consisting of a flour-mill, a couple of stores and fifteen or twenty houses and shops, besides two or three taverns. Its next station was at Fort Colborne, but trains stopped when signalled at Sherkston, midway. A third railway, following the Welland Canal, on its eastern side connected Port Colborne on Lake Erie with Port Dalhousie on Lake Ontario. A fourth line, called then the Great Western, connected Hamilton and Toronto with Niagara Falls.

The cars of the Buffalo and Lake Huron Railway were conveyed to and from Buffalo by a steam-ferry, capable of carrying twenty cars at a trip. Its yards were near the dock, but the round-house for the care of locomotives was situated at the north end of the main village, and was connected with the yards by a spur. On the shore of the lake beyond the ruins of the fort stood fifteen or more small houses, occupied by the families of fishermen. To the west and north of the fort was a tract of ordnance lands containing about a thousand acres, most of it heavily wooded with ash and elm trees of considerable size. Part of this tract near the Garrison Road along its northern limit had been cleared and brought under cultivation. That portion nearest the road had been subdivided into five-acre plots on which cottages had been built for a dozen families of army pensioners, who had occupied them for some years. The locomotive crews and most of the yardmen of the Buffalo and Lake Huron Railway lived in Fort Erie village, but there was no traffic connection between that line and the new railway to Niagara.

The landing of the main body of Fenians was observed by a party of young men from the country who were spearing fish by torch-light at the mill-race in the river. They drove rapidly homeward, drumming upon their wagon-boxes and raising an alarm at every house they passed. The news spread swiftly and the roads were soon thronged with led-horses and herds of cattle being driven off to some place of greater security.

O Neill soon after landing ordered Colonel Starr, with his regiment to occupy Fort Erie village and take possession of the railway yard above This was done about sunrise but the railway officials had taken the alarm and hastily made up all their rolling stock into one huge train drawn by four locomotives which moved slowly off when the invaders came in sight of it Captain Geary of the 17th Kentucky with a few men went in pursuit on a hand-car, but gave up the chase on arriving at Sauerwein's bridge over the Six Mile Creek, which he burned and then tore up some of the track nearby At that hour of the day he might easily have gone on to Port Colborne without opposition and destroyed the canal-lock there Starr posted sentries at the taverns and ferry landing, and made a requisition upon Dr Kempson, the Reeve, for a supply of provisions and the instant delivery of all horses in the possession of the inhabitants His men were kept well under control and no depredations were committed The village council was assembled and decided to comply as far as lay in their power Provisions were collected and delivered together with about a dozen horses The men of the lookout party were put under arrest without resistance and paroled After cutting the telegraph wires and permitting his men to breakfast in the open air, Starr called in his sentries and patrols and marched off to rejoin the main body at the camp it had formed in the orchard and fields of Thomas Newbiggging, a Justice of the Peace, on the right bank of Frenchman's Creek, close to the River Road The planks of the bridge were taken up and a hasty breastwork was built of these with fence-rails, and other materials for defence against an attack from the direction of Chippawa Foraging and scouting parties had gone out in several directions and soon returned with a number of led horses and several wagons loaded with provisions and poultry Fires were built of fence-rails and the camp assumed the appearance of a large and merry picnic party A large and well armed detachment commanded by Captain Donohue marched down the River Road as far as the mouth of Miller's Creek and burned the bridge there Early in the forenoon the United States revenue cutter *Michigan* steamed down the river from Buffalo harbour and anchored near the wharf at the foot of Ferry Street in Black Rock The captain of the ferry boat was warned that the customs officers

would not permit him to take any passengers over to Canada, but this regulation it would appear, was not rigidly enforced as a man carrying a saddle was seen to go on board soon after No embargo was placed on passengers who wished to leave Canada and some of the inhabitants of Fort Erie took advantage of this to remove their families and valuable property across the river

The steam-ferry continued to make hourly trips to and fro and it is probable that some unarmed men joined O Neill by this route Enterprising newspaper reporters certainly visited his camp and made notes of what they saw Row-boats were constantly crossing at the lower ferry, bringing food and small accessions of men, by which his strength may have increased to a thousand of all ranks About eleven o clock a m , a tug towing two canal-boats, loaded with arms and supplies of various kinds came over and landed their cargo at Freehury's wharf, where it was loaded on wagons and taken to the camp The captain of the *Michigan* attempted to weigh anchor but seeing that he would be too late to intercept these boats in American waters decided to remain where he was, being unwilling, as he stated, to risk his ship further down the river without having a qualified pilot on board At noon he began to fire a salute of fifteen minute-guns in honor of Lieutenant General Winfield Scott, who was being buried that day at West Point This caused some excitement on both sides of the river as it was at first supposed that he was bombarding the Fenian camp About the middle of the afternoon the *Michigan* dropped down stream and moored at Pratt's wharf, putting an end to the despatch of further reinforcements or supplies from that point During the day, Major General George G Meade, commanding the Military Division of the Atlantic, arrived in Buffalo and appointed Major-General W F Barry to command the District of Ontario, extending from Erie, Pa , to Oswego N Y., both places included, with headquarters at Buffalo His orders to Barry were clear and explicit

I direct you to use the force at your command to preserve the neutrality by preventing the crossing of armed bodies, by cutting off reinforcements and supplies, by seizing all arms, ammunition, etc ; which you have reason to believe are destined to be used unlawfully, and in fine taking all measures precautionary or otherwise to prevent violations of the law For this purpose you will

move the forces at your command to such points as are threatened, and you shall employ such tugs or vessels as can be procured for watching the river and lake shores, and taking all such measures as in your judgment the emergency requires

The force of troops at Barry's disposal was actually very small and was mainly at Fort Niagara, only a single weak company of infantry and a gun-squad of artillerymen being stationed at Buffalo. Two river tugs were promptly hired, manned with seamen, and each of them armed with single light gun, to patrol the river and prevent the passage of reinforcements and supplies, which was effectually done

The exact nature of the instructions given O Neill, if he received any, has not been revealed It is conjectured that his main object was to damage the Welland Canal This he might readily have accomplished by sending a strong party of mounted men with explosives to destroy the aqueduct at Welland, which was unguarded. Early in the forenoon he had secured forty or fifty horses and others could have been picked up by the way The day was fair and sunny but not hot, the roads were smooth and firm but not dusty, grass and grain were abundant in the fields and granaries The country was fair with the flowers and verdure of early summer Altogether conditions were ideal for a raid of that kind but he made no attempt to carry it out He had besides been joined by Major John C Canty who had resided in Fort Erie village for the past six months with his family, specially for the purpose of obtaining information He had made himself well acquainted with the surrounding country and knew many of the inhabitants Thenceforth he acted as O Neill's principal intelligence officer and chief of staff

Reporters, employed by three daily newspapers published in Buffalo, visited the Fenian encampment at Frenchman's Creek during the afternoon They stated that they saw officers studying maps, cooks preparing food, while most of the men, not on outpost duty or absent scouting were quietly sleeping under the orchard trees or in hastily improvised shelters A scouting party which returned from an unexpected direction caused an alarm in which shots were fired and a man was wounded

About five o clock p m., Colonel John Hoey, with two hundred men of the Buffalo regiment marched down the River Road After advancing five or six miles he saw a group of horsemen approaching, who turned about and rode rapidly away Surmising them to be British civilian scouts he halted and sent back a message About the same time O Neill was informed from another source that a body of British regulars and volunteers had arrived at Niagara Falls and was preparing to advance against him by rail, and he quickly determined to meet it on the line of Black Creek, which he presumed had already been occupied by his advanced party under Hoey The river was already so closely patrolled by Barry's orders that he relinquished all hope of being reinforced and ordered the destruction of about a thousand spare muskets and some reserve ammunition, for which he had no means of transport Some of his men had been drinking to excess at Steven s tavern near the landing and a brawl followed in which one of them was killed

Between nine and ten o clock p m , he began his march to support Hoey, who had been instructed to move on to Black Creek, but after advancing about four miles on the River Road, and crossing Miller s Creek, turned westward on the town-line road between the Townships of Bertie and Willoughby After reaching the Erie and Niagara Railway the column was halted, outposts were sent out to occupy the railway and road bridges over Black Creek and the rest of his men were allowed to lie down in the fields on both sides of the track There he waited for the expected attack It was a very secluded spot as there were no houses within a mile and the town-line road was little travelled The time was about midnight He asserted that his force had already been reduced by desertion and straggling to not more than five hundred and his statement is partly corroborated by the large number of stragglers who were seen on the river road next morning About midnight it appears that he received further information stating that force at Chippawa consisted of a battery of Royal artillery, a regiment of regular infantry, a troop of cavalry and two volunteer infantry regiments, which would advance next morning by road as wagons were being engaged for the transport of supplies A little later he was informed that a smaller body of troops, without

artillery or cavalry, and entirely composed of volunteer infantry, was preparing to entrain at Port Colborne for Fort Erie early in the morning. His decision was soon made for at three o'clock he gave orders to rouse his men and after allowing them a few minutes to prepare and eat their breakfast, marched southward through the fields until he reached the Ridge Road at Buck's tavern, where it was intersected by the Bowen Road. During this march across lots a farm wagon conveying reserve ammunition broke down and he was forced to abandon part of its valuable contents. His intention, he stated in his report, was to get between the columns and if possible defeat one of them before the other could come to its assistance. He seems to have known that the force at Port Colborne was the weaker of the two in numbers as well as inferior in military value and hoped to intercept it near the place where its progress would be checked by the break in the railway. His agents for obtaining intelligence must have been uncommonly active and successful in the night.

Dew lay heavily on the grass and the march through the fields in the dim morning light had been tiring and he found it expedient to make another short halt to close up the rear of his column. The road he had now gained commanded a wide view of the country to the west and south, it was sheltered in many places from the rays of the rising sun which already portended a very hot day and the approach of any hostile force could be easily discovered at a considerable distance. The march was continued by that road toward the Ridgeway station on the Buffalo and Lake Huron Railway less than three miles distant.

The regular troops in the western parts of Upper Canada were a battery of Royal Artillery and the 16th and 47th Regiments of Foot, quartered in nearly equal proportions at Toronto Hamilton, and London. About four thousand volunteer militia had been organized and received some training in the cities and towns mostly as infantry. Although an invasion had been threatened and in fact expected for several months, no part of this force had been efficiently organized or equipped for field service. There was but one squadron of volunteer cavalry, the Governor-General's Body Guard of Toronto, which could not be made available in less than twenty four hours. There were no engineers, army service corps,

signalling or telegraph units, and no arrangements had been made for subsisting troops in the field or transporting their supplies except by rail. No systematic method of collecting or transmitting information had been devised. Regular and volunteer troops alike had been drilled for parade purposes only instead of being trained for the emergencies of actual warfare. None of the military lessons of the recent Civil War had been laid to heart.

St. Catharines was the nominal headquarters of a field battery of artillery, which, as already mentioned, had been relieved of the care of its guns, and of two battalions of volunteer infantry, the 13th and 20th, composed of companies organized in that town and the neighboring villages from Niagara Falls to Grimsby. Another battalion of volunteers, the 13th, had been organized for some years in Hamilton and two others, the 2nd Queen's Own and the 10th, were at Toronto. The commanding officers of all these units had been warned the night before to be in readiness for active service. At 6 o'clock in the morning, General Napier, who was in Toronto, received a telegram from the watchful British consul at Buffalo, stating that six hundred Fenians had landed near Fort Erie. This was soon after followed by another from some other source, estimating their number at 1,340, provided with six guns and 2,500 muskets. Napier gave orders at once for the immediate movement of all available troops at Toronto and Hamilton toward the Niagara frontier. Before noon Colonel George Peacocke of the 16th Regiment, arrived at Niagara Falls by a special train with a battery of the Royal Artillery having six guns and wagons, fully horsed, three companies of his own regiment and three of the 47th. He did not advance further until about dark, when being informed that the enemy were marching down the River Road he went forward with his infantry by rail to secure the bridges over the creek at Chippawa, instructing his artillery to follow by road, as he stated, from the want of proper carts to convey the guns. Chippawa was occupied at 9 p.m. and Peacocke then sent out some young civilians on horseback to ascertain the position of the invaders. They learned that they were in camp somewhere near the mouth of Black Creek, but as they had not been accompanied by an officer, their information was rather vague and unsatisfactory. Before they had returned, about midnight, Peacocke had been informed

that a force of about nine hundred volunteers, composed of the Queen's Own Rifles, 480 the 13th, 265, the York and Caledonia Rifle Companies, 95, and the Welland Canal Field Battery, 60, was being assembled at Port Colborne, and he instructed Captain Akers of the Royal Engineers, who was acting as his intelligence officer, to ride across the country *and order the commanding officer to move his whole force by rail not later than 5 30 a m , and march to join him at Stevensville at 10 a m next day* The route of this movement was unfortunately selected as the station at Ridgeway was three-quarters of a mile further east than Stevensville, and the column would be unnecessarily exposed to an attack in its march to a flank The danger of contact with the enemy would have been lessened by detraining a mile east of Sherkston and the distance to march would not have been as far At that season of the year there was little difference in the quality of the roads But the only topographical guide Colonel Peacocke possessed was a postoffice map showing the mail routes, and the mail-route southward from Stevensville was marked thereon as reaching Ridgeway by the Ridge Road This was considered a sufficient reason for instructing the force at Port Colborne to detrain at that place and follow the mail-carrier's route to Stevensville

A portion of the long train of cars sent off from Fort Erie jumped the track in its flight and was ditched three miles east of Port Colborne but during the day the line was cleared and a working party under escort of a detachment of the Welland Battery was sent to rebuild Sauerwein's Bridge Mr Robert Larmour, the road superintendent, went on in a hand-car to Fort Erie village, where he arrived about 10 p m , and found the place not only unoccupied by the Fenians, but nearly deserted by its inhabitants He met Mr Richard Graham, the Collector of Customs who had visited the Fenian camp in the afternoon and seen, as he supposed, their whole force When he came away, there was no indication of a movement and he had seen a good many drunken disorderly men Mr Larmour persuaded Mr Graham to accompany him on his return to Port Colborne believing that his local knowledge would be useful in future operations On passing he found that Sauerwein's bridge had been made practicable for trains and the line was open once more He returned to Port Colborne about midnight with this encouraging information

When Lieut Colonel Booker with the 13th Battalion had arrived there by rail from Hamilton about an hour previous, he found Lieut Colonel J S Dennis, the brigade major of the militia district, in command, whom he outranked and superseded The wildest rumors were in circulation and the Queen's Own and Welland Battery were standing under arms in the streets After hearing Mr Graham's statement Colonels Booker and Dennis agreed upon a plan of operations by which they hoped to cut off the retreat of the invaders and ensure the capture or destruction of their whole force Eighty men belonging to the Welland Battery and Dunnville Naval Brigade were to embark on the steam tug *W T Robb*, which had just arrived with the latter small unit, commanded by Captain Lachlan McCallum proceed to Fort Erie and patrol the river, while the rest of their force would advance by rail as far as seemed prudent and co-operate with Colonel Peacocke next day in a general attack upon the enemy's position While they were yet deliberating, Captain Akers arrived and was persuaded to approve this plan At 3 a m a telegram was sent off to Colonel Peacocke and without waiting for a reply the detachment was embarked Colonel Dennis, who desired an independent command went on board and the tug steamed away under his orders The rest of the force was again entrained and was on the point of moving, when, at 3 45 a m, a premptory message was received from Peacocke saying that his original instructions must be obeyed and a junction formed with his command at Stevensville It was deemed inexpedient to detrain again for so short a time as the men had no quarters to go to Some of them had been drinking freely and were restless and noisy There was little opportunity for any of them to sleep or even rest comfortably At 5 a m, half an hour ahead of the time fixed an order was given for the train to start The force on board, nominally 840 of all ranks, probably did not exceed 800 effective combatants They had been under arms for twenty four hours, in a feverish state of excitement and were fatigued by travel and standing about deprived of sleep, and insufficently fed They had no blankets, knapsacks, haversacks, mess tins or water-bottles and their only means of carrying their overcoats was by wearing them in midsummer weather The only horse with the column was brought by Colonel Booker, and was taken to Ridgeway in a mail-cart No effort appears to have

been made to mount any of the other field-officers No facilities had been provided for transporting the reserve of ammunition after leaving the train nor for distributing it in action There was no ambulance or hospital staff Three surgeons were present one of whom was not in uniform and carried his instruments in a small hand-bag Shortly before six o clock the train arrived at Ridgeway and the men were quickly detrained at the platform Few people were anywhere to be seen and little information of a reliable nature was obtained The farmhouses round about were in fact almost deserted and the inhabitants who remained kept close indoors The writer had passed the night at an untenanted farmhouse nearly equidistant between Ridgeway Stevensville and the Fenian bivouac near the mouth of Black Creek and well recollects how strangely calm and quiet the night seemed to be The death like stillness after nine o'clock was broken only by an occasional far away shot the sound of galloping hoofs or the barking of a dog

Few of the officers or men were able to obtain anything to eat at that hour and much time was necessarily consumed in forming up inspecting arms and distributing ammunition Although some farm wagons could undoubtedly have been obtained had a proper effort been made to find them all the reserve ammunition was sent back in the train to Port Colborne While preparations for marching off were still in progress some horsemen from the neighbourhood rode in with information that a body of Fenians was approaching by the Ridge Road but their warning was disregarded Their report indeed seemed highly improbable since the enemy were known to have been in camp at Frenchman's Creek ten miles distant late in the afternoon before Yet these men had actually seen their advanced party and had been mistaken for mounted scouts About half an hour later Booker began his march by the Ridge Road, which as it trended easterly, was by no means a direct route to Stevensville The sunshine was brilliant and already warm The sky was cloudless and not a breath of air was stirring It was a most delightful June morning but seemed the prelude to a very hot day Meanwhile O'Neill had advanced along the Ridge Road for about a mile when his advanced scouts reported a group of horsemen riding rapidly away It was certain

that they were not friends. Next the whistle of a locomotive travelling eastward was heard and the train was apparently coming to a stop. This was after a short interval succeeded by bugle calls which betokened the presence of troops. He continued, however, to advance until he was definitely warned of the approach of a body of soldiers on the same road, when he quickly occupied a position to resist an attack along the Bertie Road which intersects the Ridge Road nearly at right angles. A shallow ditch and a rail fence on its south side fringed with trees and shrubs afforded a certain amount of natural cover which was hastily improved by pulling down the fence on the opposite side and setting up the rails on end against this fence, slanting forward, or building up A-shaped rifle-pits with rails, stones, or any materials at hand. His right rested on John Anger's brick house barn, and other outbuildings, which with its kitchen-garden and a small orchard stood in the southeast angle formed by the intersection of the roads, all of which were strongly occupied, and his line extended eastward five or six hundred yards with its left curving forward into a strip of maple woods on the crest of the ridge which here widens out to a breadth of about three hundred yards, sloping gently down to the Ridge Road and then dipping abruptly into the valley. By this disposition he planned to enfilade his assailants as they advanced along the road or over the cleared ground between it and the woods, which was much broken by orchards and clumps of trees. A small reserve was stationed in an orchard about three hundred yards to rear of his centre and a thin line of skirmishers was thrown forward nearly half a mile close to the Garrison Road under the enterprising Colonel Starr. O'Neill's force probably did not exceed 800 men, but they were the pick of his followers, well-trained in fighting under cover, thoroughly alert and ready for action.

Colonel Booker's force had advanced in a column of fours with the Queen's Own under Major Gilmour leading, followed in succession by the 13th Battalion under Major Skinner, and the York and Caledonia Rifle companies, commanded by Captain R. H. Davis. On approaching the intersection of the Garrison Road, where in the north-west angle stood Michael Huffman's small roadside tavern, whose swinging sign boldly proclaimed it to be

the Smuggler's Home a few armed men were detected lurking behind fences and trees in front The Trinity College company of the Queen's Own which was armed with Spencer repeating rifles, was ordered to extend as a firing line Some shots were fired and two other companies were sent forward at the double to prolong the firing line to both flanks Within ten minutes the fire became rapid and continuous *Standing out of doors some three miles away the writer heard the sound of the first intermittent shots, which were soon merged in a steady crash of musketry lasting for almost an hour* It now seems marvellous that so few men were hurt by such a heavy and well-sustained fusillade

Scarcely had the action begun when a telegram from Colonel Peacocke was placed in Colonel Booker's hands, instructing him to defer his departure from Port Colborne for one hour as his own movement from Chippawa would be delayed The encounter could still have been broken off without much difficulty, but as his men were full of confidence and seemed to be already driving the enemy before them with ease Booker wrote a note in reply, saying that he was engaged and asking his commander to advance to his assistance as soon as he could This was given to Detective Armstrong to be carried across country The Fenian skirmishers were steadily forced back or more probably retired purposely to draw their opponents into the ambush that had been laid for them-usually reserving their fire until their pursuers attempted to climb over a fence or were checked by some other obstacle After advancing in this manner over the fields for several hundred yards, it was discovered that the maple grove on their right was occupied by the enemy who disclosed their position by firing prematurely and the University and Highland companies of the Queen's Own were extended to the right front with orders to expel them At the same time some of the Trinity College company worked their way down into the low ground west of the road, where the men were partly screened from view by the ledge of rocks, with the intention of turning the enemy's right But within fifteen or twenty minutes the three companies first engaged were allowed to fire away nearly all their ammunition with little effect beyond enveloping themselves in a dense cloud of smoke hanging low in the morning air, under cover of which they had advanced almost

half a mile They were then close upon O Neill s main position, where he had decided to make a resolute stand and they were practically disarmed They were accordingly relieved by three companies of the 13th in scarlet coats, while the York Rifle company was sent down into the low ground on their left all of them advancing at first very steadily in extended order Separated from this new firing line by an interval of two or three hundred yards and forming an obtuse angle with it, were the two companies of the Queen s Own on the right still hotly engaged with the Fenians in the woods who were well protected behind the stout trunks of the hard maple trees which were scarred for many years after with bullet marks On the Ridge Road and in the fields on its right about three hundred yards in rear of the firing line were the remaining companies of the 13th and the Caledonia Rifles About the same distance still further back were six companies of the Queen's Own in quarter column including those which had just been withdrawn from action After sending a message to the railway station to order forward the reserve ammunition which had been so carelessly left behind on the tram Colonel Booker had dismounted and remained near the reserve In that position he could not possibly see much that was going on in front and he had not a single mounted officer or orderly with him to transmit orders or gain information His only means of conveying commands rapidly was by sound of the bugle The new firing line had moved forward with such steadiness and good order that they were at first mistaken by the Fenians for regular troops a belief which was strengthened by the sight of the red coats Availing themselves of a thicket as cover the York Rifles supported by a party of the 13th turned their right and then whole line deserted its barricades and retired upon its reserve briskly pursued O Neill himself stated that he fell back a few hundred yards and formed a new line At that moment some of his mounted men came suddenly in view around a bend in the Ridge Road, riding rapidly forward and another group of horsemen was seen in the valley on the left at a turn in a road leading straight to Stevensville The latter were neighboring farmers attracted as spectators by the sound of firing

Some person then hastily raised the cry of cavalry, which was rapidly passed along The firing line attempted to form rallying squares in the fields and their example was followed by the supports and reserve The Fenians in front were quick to seize their opportunity and rushed forward with loud yells, firing as they advanced while their comrades in the woods directed their fire with some effect at the supports Scarcely had these squares been formed when a bugler by Colonel Booker's orders sounded retire In an instant all was confusion and the retreat began in much haste and disorder It is needless to enquire where the panic started, it ended in a headlong stampede The two companies of the Queen's Own on the right were isolated for a time and lost seven killed or wounded and two prisoners in coming off The pursuit was not pushed vigorously, as the main body of the Fenians was halted near the Garrison Road, but Starr with his regiment advanced as far as Ridgeway village Few prisoners were taken, but in some way his men became possessed of a Union Jack which was afterwards exhibited in Buffalo as the colors of the Queen's Own Being a rifle regiment, that unit of course had no colors and this flag was certainly not a military standard

Colonel Booker seems to have abandoned at once all hope of rallying his men and resuming the advance The retreat was continued from Ridgeway station along the railway track towards Port Colborne When about half way to that place, Mr Larmour met them with a locomotive and two flat cars bringing back the reserve ammunition By noon the discomfitted force was again at Port Colborne utterly exhausted and dispirited Its total loss was too insignificant to account for so humiliating a reverse One officer Ensign McEachren Sergeant Matheson, and seven privates were killed, five officers and twenty-six other ranks were wounded several of whom fell into the hands of the enemy besides seven unwounded prisoners O'Neill stated his loss, as nearly as it could be ascertained at eight killed and fifteen wounded It was probably greater as nine were found dead and were buried on the field and six badly wounded men were left behind Among the killed was Lieutenant E R Lonergan of Buffalo, and among the wounded were mentioned Captain Timothy Leaven, and Michael Cochrane,

color-sergeant of the Indiana company, a very gallant fellow, who was shot down while leading the final charge with a large green flag in his hand

Well satisfied with his success and dreading an encounter with a larger force which he believed to be advancing against him from Chippawa, O Neill lost no time in beginning his retreat toward Fort Erie Starr marched down the railway track, while the main body followed the Garrison Road taking with them their unwounded prisoners

Colonel Booker was severely criticized by some newspapers for misconduct on this occasion and in consequence demanded a Court of Inquiry to investigate it, which was granted The Court was composed of Lieuteoant Colonels Denison, Chisholm and Shanly, who reported unanimously

That there was not the slightest foundation for the unfavorable imputations cast upon Lt -Colonel Booker in the public print That having fallen into error, he promptly exerted himself to repair the effects of his error in person and in a manner which could leave no stain upon his personal courage or conduct That from the time the expedition started until it came out of action, it was under disadvantages with which Her Majesty's forces seldom have to contend That more than half of the two battalions were youths under twenty years of age very few accustomed to drill and many had never shot anything but a blank cartridge

The finding of the Court, however, failed to reinstate Colonel Booker in the good opinion of the general public

It is now necessary to follow the movements of Colonel J S Dennis Having embarked on board the *W. T Robb*, the Welland Canal Field Battery, commanded by Captain Richard S King, and the Dunnville Naval Brigade under Captain (afterwards Senator) Lachlan McCallum, numbering in all eighty-seven of all ranks, he left Port Colborne about 3 30 a m and arrived at the Ferry Landing in Fort Erie village soon after daybreak Disembarking part of his force there he made a prisoner of every stranger who could not give a satisfactory account of himself Taking on board this detachment two hours later, he dropped down stream to Freebury's wharf, where another landing was made to examine the deserted Fenian encampment A number of stragglers were picked up in the vicinity Strong patrols then marched down the River Road

and westward on the Bowen Road uniting on the River Road above the mouth of Black Creek where they were once more embarked on the tug which had come down in that point There they were informed for the first time that the main body of the invaders had marched in the direction of Ridgeway early that morning Fifty-eight prisoners had been taken and the tug was crowded to its utmost capacity Returning to The Ferry Landing at Fort Erie about the middle of the afternoon the men of the Welland Battery and eighteen of the Naval Brigade were landed there Scarcely had this been done when a horseman rode in at full speed to give warning that a body of Fenians, whom he estimated at from six to eight hundred men was approaching by the Garrison Road This voluntary messenger was Captain Lewis Palmer, a man over seventy years of age, who lived on that road about two miles west of the village He had served as a private throughout the war of 1812 and had commanded a company of the Frontier Light Infantry in 1837 Captain Akers had driven into the country in the hope of getting into communication with Colonel Booker's force and had not returned A few prisoners who had been confined in the village lock-up were hurried on board the tug but instead of withdrawing from a hopeless contest with overwhelming numbers, Colonel Dennis formed his men in line on the River Road near the ferry-dock A considerable party of Fenians first appeared on the crest of the high ground north of the Bertie Road near the brick house of James Stanton, well within range of rifle fire and began firing Almost the first shot in reply, deliberately aimed by Private Daniel Sullivan of the Royal Canadian Rifles who had joined Dennis as a volunteer severely wounded Lieutenant Colonel Michael Bailey of the Buffalo regiment, who was conspicuously mounted on a white horse, and caused not a little confusion among his companions A few minutes later a stronger force of the enemy came straight down the street from the south, firing and shouting wildly as they advanced The tug hastily cast loose from the wharf and was carried down stream by the current while the officers on shore ordered their men to scatter and save themselves any way they could Dennis and McCallum with twenty-five or thirty others ran down the River Road and most of them eventually were taken on board the *Robb*, which then steamed up the river under

fire and returned to Port Colborne instead of remaining to intercept the further retreat of the enemy which was still practicable Captain King with a few men put up a gallant resistance from behind the piles of cordwood on the wharf until he fell with his ankle shattered by a musket ball As the enemy approached he emptied the remaining chambers of his revolver at them and threw himself into the river to escape their bayonets The current swept him under the wharf where he clung to its supports until rescued He was removed to a hospital in Buffalo where his leg was amputated at the knee

A few other men, with a number of civilians, most of whom had come from Buffalo out of mere curiosity, took refuge in the large wooden post-office building which was speedily surrounded by yelling Fenians, who began to riddle it with bullets at short range They returned this fire with good effect, and despite the protests of the non combatants and the shrieks of the women and children who were made to lie down on the floor to escape the bullets crashing through the doors and windows kept them as sailants at bay for a quarter of an hour The walls were stout and an attempt to force an entrance at a door was sharply repelled, in which at least one of the attacking party was mortally wounded by a bayonet-thrust in the throat Finally a young woman in desperation waved a white table-cloth out of an upstairs window and the firing outside ceased Finding that their ammunition was nearly expended and that further resistance was plainly hopeless this gallant little party surrendered In all four officers and thirty other ranks, five of whom were wounded, were made prisoners in this unfortunate affair The Fenians lost seven men killed or mortally hurt and had more than double that number wounded

An hour or two later O Neill was informed by his scouts, who were still active, and kept him well advised, that the force from Chippawa had advanced as far as the mouth of Black Creek and then turned inland He determined to retire to the car-ferry dock near the ruins of Fort Erie in the hope of receiving reinforcements or making his escape in the night A message to that effect was successfully transmitted to Colonel Sweeney the Fenian Secretary of War, who had come to Buffalo His spirits were raised by an account of a great meeting held in the opera house the night before,

which had been addressed by Senator Fitzgerald of Cincinnati and Hon John Murphy of Buffalo when $1 300 in cash was subscribed in a few minutes and the assurance given that hundreds of men had arrived in that city from all quarters, apparently eager to come to his assistance The malicious satisfaction felt by some even of the better class of citizens at his successful landing was acutely expressed in an editorial published that morning in the *Commercial Advertiser*, then considered a very conservative newspaper

With the memory of the recent past action and sympathy of the Canadian people in behalf of the rebels still fresh in our minds it is but natural that we should contemplate the present demonstration, and in fact, any demonstration which may be made as a retributive visitation over which we have no tears to shed

Towards night he moved his whole force to the ruins of Fort Erie about four miles above his original point of debarkation within musket shot of the landing place of the car-ferry then lying on the opposite side of the river and took up a good defensive position inside its earthworks, sending forward outposts to observe all probable ways of approach He took with him all his prisoners who were able to march but left behind five of his own men, who were too badly hurt to be removed There he awaited further orders His intentions were stated in his report rather vaunting terms

About 6 o clock p m., June 2. I sent word to Captain Hynes and our friends in Buffalo that the enemy could surround us before morning with 5,000 men fully provided with artillery and that my little command which had by this time considerably decreased could not hold out long, but that if a movement was going on elsewhere I was perfectly willing to make the old fort a slaughter-pen which I knew it would be next day if it remained *For I would never have surrendered*

His position was well chosen for either receiving reinforcements or embarking as the *Michigan* still lay below at Pratt s wharf

At 4 15 that morning Colonel Peacocke had been joined by 150 of the 47th Regiment from London, 415 of the 10th Battalion from Toronto, and 350 of the 19th Battalion from St Catharines increasing his strength to 1 400 of all ranks and arms with six

field guns He had planned to advance at 6 a m , but the lack of efficient commissariat arrangements for so large a force made it impossible to give his men their breakfast in time and he postponed his departure for one hour sending a telegram to Colonel Booker to do the same Although the best and most direct route was due southward by the Sodom road, a distance of only eight miles, his wretched map indicated that the mail-route followed the River Road to the mouth of Black Creek, thence southward to the Bertie-Willoughby town-line, then westward to New Germany and then southward again to Stevensville, a roundabout course of at least eleven miles Knowing that a body of the enemy had been near Black Creek in the night and having since lost contact with them for want of efficient mounted scouts of any kind. Peacocke decided to take the longer route An hour's delay became two and it was eight o'clock before he started The bridge over Usher's Creek broke under the weight of the guns and caused considerable delay The distant sound of musketry was heard but gradually died away On arriving at Black Creek he found that the bridge had been destroyed and the enemy had marched off toward Ridgeway. Presently Detective Armstrong arrived with Booker's message It was then 10 30 a m , and he was still four miles from the scene of action The head of the column was turned southward The bridge on the town-line over another small stream broke down and again there was some delay The heat had become excessive, and as the regular troops were burdened with their knapsacks containing their full kit and carried besides sixty rounds of ammunition, and were still wearing their heavy clothing, they felt it greatly Many of them had collapsed and one non-commissioned officer of the 47th died from the effects of sun-stroke The information Peacocke had received made him anxious and he endeavored to accelerate his march, riding himself with the advanced guard On arriving at New Germany about 11 30 a m he received a message from the rear of the column informing him that the men were suffering much from the heat and dust and many were lagging behind or falling out in consequence The officer commanding the battery, indeed reported that his escort had so much diminished that he did not consider it safe to continue the march without having it increased He decided then

to halt there and allow his men to rest and take their dinner Infantry scouts were sent out and it was ascertained that Colonel Booker had retreated and a junction at Stevensville with his force was no longer possible At four o'clock a report was received that the Fenians had retired toward Fort Erie and orders were given to resume the advance in the cool of the evening About half past five o'clock, when a start was again made, he was joined by the Governor-General's Body Guard a squadron of volunteer cavalry from Toronto, commanded by Major G T Denison, which was at once sent on in advance The march was continued southward through Stevensville to the Bowen Road on which the head of the column was turned eastward When the cavalry advanced guard had reached the house of Robert Bowen, near the intersection of roads where the brick school house now stands, the leading patrol observed a group of men in the road ahead of them at a place where it was skirted by dense woods on either side for almost a mile It was then nearly dark and in the uncertain light the actions of these men seemed suspicious and when approached they climbed over the fences and disappeared in the woods A report was sent back and the whole column came to a halt Colonel Peacocke himself rode forward accompanied by Captain Denison and other officers Another reconnoitering party was sent on who saw, or thought they saw, a single sentry who also moved off the road into the woods After some deliberation two companies of the 16th Regiment were ordered forward to search these woods in extended order This was done but after stumbling about in the dark for half an hour and finding nobody and hearing nothing they were recalled and orders were given to march straight ahead with the intention of attacking the enemy who were then supposed to have returned to their first camp near the mouth of Frenchman's Creek The men, who had been seen, were believed to be their advanced outpost Bowen who was standing near Colonel Peacocke, then said that they could not go by that road as the bridge over Frenchman's Creek had been destroyed It was determined to turn aside on the road to the right where there was more cleared ground and bivouac Strong outposts were established and orders given to be in readiness to resist a night attack No fires were lighted and the horses were kept saddled or harnessed The retreat of the in-

raiders was then believed to be entirely cut off and they were expected to make a desperate resistance In the course of the night Peacocke was informed that another considerable body of infantry under Colonel Lowry of the 47th Regiment, with four field guns had arrived by rail at Black Creek, but at the same time a telegram from Buffalo asserted that reinforcements estimated at a number between two and three thousand men had crossed the river to join the enemy He was reinforced by a volunteer battery of garrison artillery, without guns, which he had left behind at Chippawa This intelligence made him wary, but his troops were roused at daybreak and ordered to breakfast at once and be in readiness to march at 5 a m Before a start was made Hon John Hillyard Cameron, who had accompanied the other body of troops, which had come on in the night on the Erie and Niagara Railway and detrained at the crossing of Frenchman's Creek came up the Bowen Road on horseback with intelligence that the enemy had escaped When this force had detrained Colonel (afterwards Lord) Wolseley who was acting as a staff-officer for intelligence had gone forward on horseback with a few men and learned that the remnant of the Fenian force, estimated at between five and seven hundred men, were in a large barge or canal-boat moored astern of the *Michigan* in United States waters in Niagara River Peacocke's advance was resumed, marching southward and dividing into two columns, taking the Bertie and Garrison Roads when they reached them successively The great body of woods on the Ordnance Reserve west of the ruins of Fort Erie was carefully searched by a long line of skirmishers with its right flank extending as far as the shore of Lake Erie A few men, who were supposed to be stragglers from the raiders were seen and four of them were reported to have been shot

The retreat of the enemy had been well managed About 2 a m signals from their camp at the old fort were seen in Buffalo Two powerful tugs with a large barge which lay in readiness in Buffalo Creek, at once steamed out of the harbour and crossed the foot of the lake to the wharf of the Buffalo and Lake Huron Railway where the men from the neighboring bivouacs were quickly embarked The *Michigan* was still moored at Pratt's wharf more than four miles down stream, and the picket boats engaged for

patrolling the river were not in sight All the sick and wounded who were being cared for at the post office and at station of Erie and Niagara Railway to Fort Erie Village which were temporarily converted into hospitals for them were abandoned with their attendants So hurried was this embarkation that the outposts were not called in and altogether it was believed that about 150 men were left behind Forty of them were stated to have escaped later in small boats When the tugs with the boat in tow were in mid stream they were overtaken by the tug *Harrison* employed as a patrol boat by General Barry The two tugs on board which it is said several hundred of the raiders including the principal officers were concealed were allowed to proceed into Buffalo harbour where the passengers were placed under arrest by the United States Marshall but the barge was taken down the river and moored under the stern of the *Michigan* where the men on board were detained for several days in considerable discomfort until instructions were received from Washington to release them on receiving sureties that they would appear for trial Both Captain Bryson of the *Michigan* and General Barry sent courteous messages to the commanding officer at Fort Erie assuring him of their intention to co-operate to the full extent of their ability in preventing any repetition of the invasion The general good conduct and even the good manners of most of the raiders was the subject of favorable comment among the inhabitants who had come in contact with them They had not been guilty of any acts of indiscriminate plunder or violence of any kind on the march Women were not molested or insulted and deserted houses were not broken open Horses, indeed, were taken with carriages harness and saddlery but that was in accordance with the usages of war, to which they had become accustomed in the recent civil contest, and provisions were requisitioned in considerable quantities Their prisoners were treated with such consideration and even kindness that they had no cause of complaint

On June 5th the Attorney-General of the United States issued a rather tardy order to the district attorneys and marshals

> By direction of the President it is made your duty to cause the arrest of all prominent leading, or conspicuous persons called Fenians who you may have probable cause to believe have been or may be guilty of violations of the neutrality laws of the United States

Next day President Johnson published a proclamation warning all citizens and residents of the United States of the penalties to which they would become liable by any infraction of the neutrality laws of the country or of the laws of nations. On the same day John O'Neill, Owen Starr, John Hoey, and other leaders of the raid appeared at the Erie County Court House in Buffalo and were admitted to bail in the sum of $6 000 each, which was readily furnished by local sympathizers. The Commissioner then informed them that they were discharged and at liberty to go wherever they wished, amid great applause from those present.

"An individual in the room proposed three cheers for the Colonel (O'Neill)," said the report published in the *Commercial Advertiser* of June 7, "and this was responded to in the most enthusiastic manner, the walls of the Court House fairly echoing with the loud huzzas."

The hero of the occasion was then escorted by his admirers to the Mansion House, then the principal hotel in the city, and in response to the clamorous outcry of an enormous crowd presently appeared in the balcony overlooking Main Street. He is reported to have said:

"Gentlemen! You may not be aware that I am no speech-maker. The only kind of speeches I am accustomed to are such as are made from the cannon's mouth. Situated as I am at present I can only advise you to retire to your homes peacefully and in an orderly manner. Good-by."

He left the city that night.

On June 8 General Barry, who seems to have executed his instructions in a thoroughly prompt and fearless manner, issued another drastic order:

"In compliance with instructions from Major-General Meade, in virtue of power vested in him by the President of the United States, the transportation over railroads, by water or other mode of public conveyance, of any persons or material of war designed or supposed to be designed to violate the neutrality laws is forbidden. The transmission over the telegraph wires of messages in cypher or otherwise, from Fenians, or in matters relating to Fenian movements, is also forbidden.

"All persons are warned that any evasion or disregard of these prohibitions will be treated as aiding and abetting the violators of law."

The number of Fenians from other places who had come to Buffalo was still very large and he was extremely anxious that they should disperse and leave the vicinity of the frontier His recommendation that they should be offered assistance to return to their former domiciles soon bore fruit in the following order which he published four days later

"Authority having been given by Maj Gen Meade to furnish transportation, upon certain conditions to all Fenians now assembled on the Northern Frontier who desire to return to their homes and are without the means of defraying their own expenses public notice is hereby given of the fact All such persons now in Buffalo or its vicinity who desire to avail themselves of this opportunity and who will give their written parole to desist from any further attempt to invade Canada, and to return quietly to their homes, will be furnished immediate transportation

Those who attempted to take advantage of this offer next day were mobbed by their recalcitrant comrades on their way to the train and taunted as being cowards and traitors On June 14 General Meade arrived in Buffalo and after a consultation with General Barry they decided to supply transportation unconditionally for all who still remained and this modification of the order had the desired effect

President Johnson was caustically criticized by many of his countrymen, who at that time were in a particularly critical mood toward him Some blamed him for not having issued his proclamation earlier and some denounced him for issuing it when he did In his message to Congress at the end of the year he considered it necessary to justify himself at considerable length in a rather spineless manner, making at the same time a singular misstatement as to the date of the raid

"On the 6th of June last in violation of our neutrality laws" he wrote, "a military expedition and enterprise against the British North American colonies was projected and attempted to be carried on within the territory and jurisdiction of the United States In obedience to the obligation imposed upon the Executive by the Constitution to see that the laws are faithfully executed, all citizens were warned by proclamation against taking part in or aiding such unlawful proceedings, and the proper civil, military, and naval officers were directed to take all necessary measures for the enforcement of the laws The expedition failed but it has not been

without its painful consequences. Some of our citizens, who, it was alleged, were engaged in the expedition, were captured and have been brought to trial as for a capital offence in the Province of Canada. Judgment and sentence of death have been pronounced against some, while others have been acquitted. Fully believing in the maxim of government that severity of civil punishment for misguided persons who have engaged in revolutionary attempts which have disastrously failed is unsound and unwise, such representations have been made to the British Government in behalf of the convicted persons as, being sustained by an enlightened and humane judgment, will, it is hoped, induce in their cases an exercise of elemency and a judicious amnesty to all who were engaged in the movement. Counsel has been employed by the Government to defend citizens of the United States on trial for capital offences in Canada, and a discontinuance of the prosecutions which were instituted in the courts of the United States against those who took part in the expedition has been directed.

"I have regarded the expedition as not only political in its nature, but as also in a great measure foreign from the United States in its causes, character, and objects. The attempt was understood to be made in sympathy with an insurgent party in Ireland, and by striking at a British Province on this continent was designed to aid in obtaining redress for political grievances, which, it was assumed, the people of Ireland had suffered at the hands of the British Government during a period of several centuries. The persons engaged in it were chiefly natives of that country, some of whom had, while others had not, become citizens of the United States under our general laws of naturalization. Complaints of misgovernment in Ireland continually engage the attention of the British nation, and so great an agitation is now prevailing in Ireland, that the British Government have deemed it necessary to suspend the writ of *habeas corpus* in that country. These circumstances must necessarily modify the opinion we might otherwise have entertained to regard to an expedition expressly prohibited by our neutrality laws. So long as those laws remain upon our statute books they should be faithfully executed, and if they operate harshly, unjustly, or oppressively, Congress alone can apply the remedy by their modification or repeal."

None of the raiders were ever brought to trial in the United States, the district attorney, as the President's message shows, having been instructed to enter a *nolle prosequi*. O'Neill's official letter, although written immediately after his return from Fort Erie, was kept secret for obvious reasons. Four years later, after the ignominious failure of another attempt at invasion of the

frontier of Lower Canada on 25 May, 1870, also directed by him, it was published in New York It is a candid and straightforward narrative, in the main probably truthful and comparatively free from bombast

RECOLLECTIONS OF THE BATTLE OF RIDGEWAY

By J F Dunn, Ridgeway

You have given as the subject of my address today Recollections of the Fenian Raid I would not lead you to think I really witnessed the events I am about to describe My home at this time was twelve miles from the battlefield Four years after the battle I came to Ridgeway a boy just out of school A trip to the battle ground always had an attraction for me and I have had exceptional opportunities of securing data I feel quite sure I shall be able to leave with you some information not before published

I am indebted for data to Andrew Benner of Ridgeway who although near his 80th year is still hale and hearty Mr Benner followed the Canadian troops from Ridgeway to the battle ground and witnessed nearly all of the battle To the late Jacob Steinman who helped bury the Fenian dead and to Patrick O Dea Jr son of Patrick O Dea of Buffalo, N Y., the Fenian Secretary of War Patrick O Dea, Senior up to a few decades ago, could often be seen on Main Street conspicuous by the large green harp embroidered on his left arm His contribution to the cause was $250,000

His son used to come into the Main Street music store in which, during the winter months I was employed as a salesman and buy pianos for his houses As I rented a room from him on Franklin Street I got to know him pretty well and he gave me a very highly colored engraving of the Battle of Ridgeway as he put it, painted from an Irishman's standpoint Incidentally he gave me some valuable information in regard to the Fenian organization, a part of which I shall use I am also indebted to three other persons whom I shall mention in this narrative

John O Neill, famous fighter during the American Civil War and commander in chief of the Fenian Army during the Battle of

Ridgeway, on June 2nd, 1866, is worthy of a short sketch In the year 1862 Colonel Morgan, editor of one of the southern newspapers, was commissioned by the Provincial Government of the C S A to organize a regiment of mounted troops not less than 600 men for guerilla warfare Officered by the chivalry of the south, this daring band of rough riders ravaged the country north of the Mason and Dixon line Sweeping up horses from the many stock farms, they put to the torch every factory and mill whose owners failed to put up the price and next day would burn a town 60 miles away Brigadier General Stoneman who commanded one of the finest cavalry brigades in the service, was asked to organize from his brigade a composite regiment of cavalry This was done and the 7th Michigan were given the best horses that money could buy and arrangements completed for fresh mounts when needed The orders were to follow, night and day this fire brand and destroy his force Colonel John O'Neill was given the command How after several historical battles he finally, on the banks of the Ohio River, laid the rebel chieftain low and destroyed his command is a matter of history

I am giving you this that you may know the manner of man Colonel Booker had to meet on the memorable 2nd of June A few years ago I spent a pleasant evening with a gentleman who as reporter for an American daily followed the northern army during the war Said he I knew O'Neill and his fine regiment He was a perfect specimen of the dashing, dare-devil Irish soldier and his men adored him

At the beginning of the American civil war my twin brothers Charles Sperry Dunn and William Carter Dunn, left their home in Pelham and enlisted in the same cavalry brigade Charley fought under O Neill, in the 7th, throughout the campaign and until the close of the war I have often wondered what my brother would have said had he known that the man for four long years he had followed in many a hard fought battle would one day at the head of a hostile army invade his native country His twin brother (they were in the same brigade but different regiments) was killed at Fayetteville, N C , near the close of the war

When I asked the war correspondent how so intelligent a man could entertain such a wild proposition as an invasion of

Canada, he replied "Well, the war was over and he was out of a job" The adventure appealed to a man of his temperament, then the large sum of money he was paid no doubt came in handy

I learned from another reliable source that General O Neill in discussing the battle some years afterward, used the following criticism "I have nothing but praise for the conduct of the enemy at this battle Up to the time when they made the fatal mistake of forming the square they had driven in all my skirmishers and were steadily advancing on my main position which was well fortified While I had a number of veterans many of my men had never been in battle and gave us a good deal of trouble We were to tell the truth, just on the point of retiring to the woods near by, when the enemy, seeing a few of my men who had horses they had picked up, formed a square to prepare for cavalry Seeing their mistake, the officers evidently gave orders to reform It was my opportunity and just at the psychological moment I gave the order to charge My men gave the old Union yell and some southern vets gave the Rebel yell, Yi-Yi-Yi in the well-remembered high key and you know the result On the retreat the officers repeatedly rallied a part of their troops in fact, they gave us a few volleys, but all was confusion and we won the day"

In corroboration of what I have just said allow me to quote from "Troublous Times in Canada," page 53, a book written by Capt John A MacDonald, ex-Capt 43rd Battalion Ottawa and Carleton Rifles I met Capt MacDonald about ten years ago and spent a very pleasant hour with him Capt MacDonald was a veteran of the raids of 1866 and also in 1870

"The unfortunate termination of the Battle of Ridgeway was a great disappointment to Lieut -Col Booker's force and he was severely condemned for having given the fatal order, which resulted in huddling up his men in a square in an exposed position, and finally resulted in a retrograde movement But under similar circumstances any other officer might have done likewise and to his credit it may be recorded that he did his best to retrieve the consequences of his error, and by personal courage in the field, endeavored to stop the retreat He had no staff to assist him, and was the only mounted officer on the Canadian side so that he was at a disadvantage Moreover, he had never previously manoeuvred

a brigade, even on parade, and to handle one in battle was a trying ordeal to an inexperienced officer who had never before been under fire.

It was a most disastrous occurrence for in another ten minutes of fighting General O'Neill's forces would have been defeated and in full retreat. In fact O'Neill himself admitted this. He complimented our men highly on their courage and steadiness and said he had taken them for regular British troops and could not believe they were merely Canadian volunteers without any previous experience.

I have it on the best of authority that General O'Neill frequently praised the gallantry of the Canadian force, on one occasion, using the following words: "In my four years of hard fighting I have never seen inexperienced troops fight more gallantly than did those Canadians. It is just what I might have known, though. You see I know the breed." He had a large number of Canadians in his famous regiment. As the archives at Washington reveal the fact that 47,436 Canadians enlisted during the war in the armies of the north we can readily believe this.

On arrival of the special train containing the Canadian forces they disentrained and formed up in the following order: The Queen's Own Rifles, under command of Major Charles T. Gillmore, led the van. No. 5 Company were armed with Spencer repeating rifles and were the advance guard. The York Rifle Company, Capt. Davis, next. The 13th Battalion under the command of Major Skinner and the Caledonian Rifles, formed the rear guard.

When half the force had passed the house now owned by Ellis Doan (about three-quarters of a mile from the village) the skirmishers sent out by the Fenians opened fire from a thicket of pines, about 300 yards east of the ridge road, upon which our men were marching. At a sharp command from Col. Booker they deployed in skirmishing order and the fire was returned. The Fenians retreated, followed by the Canadian force, firing as they advanced. The Fenians joined by other skirmishers who were just north of where the Ridge Road crosses the Garrison Road, now opened a galling fire from a sheltered position. Ensign McEachren fell on a broad flat stone at the top of the hill, just in front of where Ben Weaver's house now stands and was carried into a log house a few yards

from where he fell He and another soldier was also killed on the hill Chas Lugsdin was shot through the lung John White of the Highland Company was shot in the arm near the shoulder, and Lieut Routh was shot through the lung and hip, all very seriously wounded and very weak from loss of blood were carried into the log house These men were nursed and taken care of by the late Mrs Jacob Danner and her little grand daughter, Georgia Beam

On Monday, two days after the battle, the wife of Lieut Routh, the sister of Chas Lugsdin and the wife of John White, arrived to care for the wounded Before that the army surgeons assisted by Mrs Dannet and her little grand-daughter cared for the wounded There were a few other wounded men in this house, but I mention those too badly hurt to be moved

If you should ask why I am so well informed in regard to this part of the narrative, I might reply that eight years after the battle I married the little grand daughter If you will call at our house we would be glad to show you a copy of Byron's poems, bound in black and gold on the fly leaf of which is inscribed Presented to Miss Georgia Beam as a slight acknowledgment for courteous attentions received at Ridgeway on June 2nd, 1866 W D Dobbie

Mr Dobbie was a veteran of the Crimean War

Sergt Hugh Matheson and Corporal F Lakey who were severely, though less seriously wounded than the three above mentioned, were removed to St Catharines and died there Sergt Matheson on June 9th and Corp Lakey on June 11th Mrs Dunn has always claimed that if they had been left in the log house to be taken care of there, their lives might have been saved

After about twenty minutes of sharp fighting the Fenians fell back to the main body just north of the house now owned and occupied by Albert Athoe, then owned and occupied by the late John Anger, father of W E Anger of your city John Athoe purchased this property about ten years after the battle The main body of the Fenian force were just north or rather north-east of the brick house and here the real battle was fought O Neill had placed fence rails in a slanting position and thus had the advantage of cover, while the Canadian force fought in the open Despite this fact, more of the enemy were killed than of our force

Six Fenians were buried in one grave in a bush between the John Anger house and the property owned by Wm Teal, one in the orchard of the property now owned by Mr Litchenberger and one close to the Ridge Road and directly in front of the property now owned by Fred Fretz Probably two of those bodies were removed by relatives

Mr Benner told me he well remembers a big Irishman who came looking for his son who as he put it did not come back Said Mr Benner We dug up the six, then the one in our orchard, and I am sorry I cannot say if he found him, as I did not go to the last place with him I have heard however from another source, that the old man recognizing his son's shoes on the feet of the man he hired to disinter the body, made him point out the spot where his body was buried and he found him in the eighth grave

Of the eight Fenians who were buried after the battle, it is safe to say not one of them are resting in their graves today Jacob Stemman who knew the location of every grave told me of a certain American doctor who wished to procure a skeleton and although every place was searched, not one could be found He then knew why so many visitors from over the river and which he suspected were medical students, had asked to be shown the places of burial

I shall close with an old recitation I have not given since 40 years ago I found I could remember but the first and last verses The rest I have tried to supply

THE FINNEGAN FIZZLE

When the copperheads and rebels in the old United States
Were hatching up a shindy about their darky pates,
There came a wail of sorrow, across the briny sea,
That Mister O McFinnegan wanted Ireland to be free
So Master O McFinnegan, and Thady J McPhee
They organized the circles, and the centres, don't you see,
To coax the funds that bought the guns and filled the canteens, too
To prune the boys to make a noise, and raise a hullaballoo
So Paddy O Dea and Terence O Shea, and Phelim O McGore
They canvassed all the faithful and raised the cash galore
Forty cents from Pat and Bridget, twenty cents from many more
Was the purse that O Mahoney gathered up among the poor

With a lot of rusty muskets and a thousand old canteens,
They set out to cook for Canada a dash of Irish greens,
But the redcoats sat the table in such a spicy way,
That O Fennegan decided to dine some other day
So back across the border hitter skelter ran the host,
Leaving cook and bottle washer to settle up the cost,
And the circles and the centres went to everlasting smash,
While the President and Secretary gobbled up the cash

Tablet in Memorial Methodist Church, Ridgeway

SACRED TO THE MEMORY OF THE RIDGEWAY MARTYRS

Who Fell Defending Their Country in the Fenian Invasion, June, 1866

MALCOLM McECHRON, Ensign
Queen's Own (Killed)
HUGH MATHESON, Sg't
Queen's Own (Died of wounds)
WM. SMITH
Queen's Own (Killed)
I. H. MEWBURN
Queen's Own (Killed)
FRANCIS LAKEY, Corp
Queen's Own (Died of wounds)
MARK DEFRIES
Queen's Own (Killed)
WM FAIRBANKS
Queen's Own (Killed)

Go strew his ashes to the wind
Whose sword or voice has served mankind,
And is he dead whose glorious mind
Lifts thine on high
To live in hearts we leave behind is not to die

Erected by the citizens in the vicinity of the Battleground.

THE FENIAN RAID IN WILLOUGHBY

By George Wells

Reminiscences of my boyhood days at the time of the Fenian Raid when I was on the farm in Willoughby, my native Township, is the subject I have chosen for this brief paper.

The first chapter as I remember in the Fenian Raid—as relates to the invasion—a chapter apparently unknown to many of the older citizens of the Township—and to none probably of the present generation, as I have never read it in print.

I remember it was a beautiful morning in June—Friday, the 1st day of the month 1866—that the Fenians crossed the Niagara River from Black Rock, on the American side, to the Canadian side, about one mile below Fort Erie, a place known as the Lower Ferry Dock. It was between the hours of three and four o'clock in the morning, and they crossed in scows seized at the Buffalo docks by General O'Neill, the Fenian commander in charge of the army. I was told the following account by an old resident of the county.

Conlon Bros. (John and Thomas) of Thorold, Ont., (of whom Canada had no more loyal citizens) were extensive dealers in timber and wood in those early days and a large part of their business was transacted with Buffalo merchants. Conlon Bros. were the owners of a number of scows which were used for transporting their products to the American cities.

On this memorable morning one of their scows had just been unloaded at the dock in Buffalo and the captain was making preparations to return home when the boat was seized by General O'Neill (with others) and was used to carry the Fenians across the Niagara River, the steam tug J. H. Doyle was also seized to tow the boats. The tug was owned in Buffalo, and was afterwards bought by the late Capt. James Bampton and brought to Welland and rebuilt, and the named changed to the "*Verner*."

Some years later John Conlon was a candidate in Welland County for the Dominion House of Commons, and the argument was used against him in the campaign (not from the public platform, but by unscrupulous enemies) that he had loaned the scow to General O Neill for that purpose

As I have stated, it was a beautiful June morning that I was wending my way to school at No 6, little knowing of the thrills that were awaiting me at the little country school with its peaceful surroundings, which was located about one and a quarter miles from my home When nearing the school a number of the children—who had heard the news— came running to meet me Some of the older ones with sad faces (who understood the situation) and others with smiles because the teacher had dismissed them and thinking, no doubt, about the extra holiday We all went back to the school house when the teacher dismissed us My imagination is that I beat all world s records as a sprinter for that mile and a quarter home to spread the news that the Fenians were over

Father and mother and many of the neighbors had received the terrible news—but father did not appear to get excited My two older brothers had mounted their horses and went on a scouting expedition in the direction of New Germany

Many thrifty farmers in the neighborhood carried large sums of money in their homes—as there was not the banking facilities we have today—banks were few and far between But I had heard father say that T C Street was the banker for most of the farmers around him as he held the mortgage on their farms

Perhaps had it not been for the Fenian scare I would never have known how much money my father had at that time, but, with mother, I was taken into his confidence and the money was brought forth to be planted We lived in a log house with no cellar, so we could not plant the money in the cellar There was a large root house and there the money was interred in about two feet of earth in the presence of father, mother and myself There was no paper money, it being all gold and silver and was placed in two glass fruit jars

Father dealt quite extensively in cattle, sheep and horses, and his buyers in those early days were nearly all Americans I have

seen them come to the house to pay father for the stock and they would have a long leather bag with a padlock at one end, which they would open up and pour the gold and silver out on the dining room table—and the table was quite large as there were ten in the family

By the time the money was secreted one of my brothers had returned with the news that the Fenians were taking all the horses for their cavalry and scouting

The next thing was to hide the horses, which was no easy matter There was a small creek that ran through father's farm and it was divided in one place, forming quite an island which was thickly covered with trees and there the horses were carrolled Father did not bother with the cattle or sheep

By the time we returned from caring for the horses we saw many loads pass by containing furniture, bedding and other household goods, which were making their way into the interior—no doubt many of them to relatives One of our neighbors who had moved from near New Germany, was besieged with his kin till Sunday, when the excitement blew over and all returned to their homes

On Sunday, the day after the battle, my father took me to see the soldiers encamped at New Germany

It was a grand sight to see, and one that has never been erased from my memory

MY RECOLLECTIONS OF THE FENIAN RAID

By M G Sherk

At the time of the Fenian Raid of 1866, we were living in Stevensville, a small village about four miles from Ridgeway and about the same distance from the locality on Limestone Ridge, where the battle occurred. My father, Rev A B Sherk, a minister of the United Brethren Church, the night the marauding army led by General O Neill crossed the Niagara River into Canada, had been attending an evening meeting in the U B Church on the Garrison Road, three miles from the village of Fort Erie. He spent the night at the house of John Hershey, one of his church members, a well-to-do farmer, and a man prominent in municipal affairs in the Township of Bertie. Early the following morning he was sitting chatting with his host, when a neighbor came in and saluted Mr Hershey with "John, did you hear the news? The Fenians came over last night, eight hundred strong and fifteen hundred more are ready to follow." My father's first thought was of his family, so he at once set out for home. My mother, alone with her children, was awakened at early dawn by the noise made by numerous vehicles passing through the village, and on going to the front door of our house that stood near the roadway saw women and children, some of them partly dressed, huddled in wagons along with a few articles of furniture, bedding and provisions, on their way to the big marsh a few miles back in Humberstone Township. One of the women wringing her hands frantically, called out to my mother "The Fenians are coming. They are only a few miles behind. They are killing men, women and children as they go." I remember as a boy, not quite five years of age, my mother taking me across the bridge over the creek, to the house of Peter Hendershot, the local merchant. Mr Hendershot being away at the time, Mrs Hendershot was having a wagon

loaded with a few things preparatory to fleeing, but as my mother expressed no great concern, she decided to give up going. Just then my father was seen coming down the hill in his gig and I followed my mother out to the middle of the cross-roads to meet him. He was anxious to follow the fugitives farther into the country. My mother objected but proposed going down to her father's (Capt. M. D. Gonder), one mile below Black Creek post office, on the Niagara River Road. This proposal did not suit my father who thought there would be more danger there. My mother then said she would be willing to go to her uncle's, Joshua Fares, a few miles into Crowland Township.

My father gathered a few things together and placed them in his gig and we started, but when we got to our destination we found my mother's uncle's family with their wagon loaded with a few necessaries, ready to go farther away from the border. On my mother laughing at her Aunt Sally Ann, for being so frightened, her aunt said to her: "Well, Rebekah, if you are willing to stay, we will."

I remember going out into the old fashioned garden at the back of the house, the morning of the battle and hearing the noise of the engagement on Limestone Ridge. My father and mother's uncle went together to view the battle-ground shortly after the battle and before the bodies of the dead Fenians had been taken from the field. He noticed that the buttons had been cut off their tunics. He thought it had been done by their comrades, but it was more than likely done by visitors who carried them away as souvenirs.

After we had left our home at Stevensville one of my mother's brothers (H. J. Gonder) arrived there, sent on horseback by my grandfather to see how things fared with us, but as we were not found he, accompanied by several men on horseback, one of them being I. H. Allen, for many years postmaster and general store keeper at Black Creek, rode along the river to the Fenian camp-ground, to have a look through field glasses and telescopes at the Fenians, when a Fenian officer rode up to them and took them prisoners. They were kept in camp until twelve o'clock that night and then released. Their horses were not given to them but were

found a few days afterwards running loose on the roads after the Fenians had skedaddled, somewhat scarred by the usage given them

The house belonging to my grandfather that my uncle rode was called "Fenian" ever after

Some of our soldiers came from different parts of the country by way of the Falls, where they detrained and then took the road by way of Chippawa to New Germany and Stevensville and thence to Fort Erie to join the forces already assembled. My father being on the road at the time was stopped by our officers in command to enquire the way. Some of the poor young soldiers, many of them students from Toronto University, who were so hurriedly called on from Toronto and other places, were so fatigued by forced marching and used up for want of sleep and with hunger, that the farmers' families along the river road came out and served them with milk and other refreshments as they marched past.

Although the engagement at Limestone Ridge would be considered a trifling affair, it showed the necessity of being prepared and of a proper organization of the militia. My maternal grandfather, M. D. Gonder, who had served as acting-captain after the death of Captain Ussher, who was assassinated by MacKenzie's men who came from Navy Island in the Rebellion of 1837, and who was afterwards captain in the militia for years, made the remark that our militia was very badly handled and that it should have been an easy job to have rounded up the Fenian mob.

The rank and file of the Fenian army were made up of very ignorant Irish, many of them believing that Canada was a wilderness and that it would be an easy matter to take possession of it and then parcel the land out among themselves. The officers who had been living in luxury from the funds that had been furnished the society by sympathizing Irish, many of them hard working servant girls, had to make some sort of a raid to pacify their followers even if they knew it would result in failure.

It is said that in the remote Irish settlements of Canada there were parties who were in sympathy with the Fenian movement and who expected to acquire the property of their neighbors if the invasion was a success. In York County in the immediate vicinity of the then Toronto of those days there were known to be

at least two Fenian head-centres and much secrecy was observed in the movements of these people Quantities of pikes were said to be stored in the houses of members of the organizations Of this I am informed by a then Toronto citizen who has a distinct recollection of the Fenian Raid

On the Sunday following the day of the battle services in some of the country churches of the frontier were omitted, there being no congregations to greet the ministers, the people being in a condition of panic not thinking of worship

I heard my father say that after the Fenians had embarked at Fort Erie, in a large scow, for their return to U S soil, they remained for some time midway in the stream not being allowed to land on the New York State side of the river Uncle Sam's government at Washington after having allowed the affront to the British flag, seeing the predicament they might be placed in had in the meantime got busy and was puzzled what to do, not knowing whether to let the Fenians land on U S soil, or to leave them to the mercy of the Canadians Some of our officers who arrived on the scene after the Fenians had departed were for putting a shot into the boat and sinking the ruffians, bag and baggage, but on deliberation it was considered unwise to do so, as the act might lead to international complication, it being a question whether the boat was in U S or Canadian waters We think however, the U S would have had no reason to complain for they knew beforehand that the Fenians intended to invade Canada having allowed them to arm and equip themselves as well as to drill on their territory and to parade in the streets of Buffalo and Chicago The people of the Northern States at that time we know had no great love for Britain on account of the sympathy shown in their Civil War to the Confederate States by the British people We believe that their old animosity has been forgotten and that the U S and Great Britain are now on lasting fraternal terms

Several of the farmers in the vicinity of Black Creek on the Niagara River who had valuable horses, it is said, swam them across the river, three-quarters of a mile wide at this point, rather than run the risk of their falling into the hands of the Fenians, and it is said some of them moved part of their household effects over as well My grandfather gave orders to one of my uncles

to gather all the horses on the place together and take them to another farm he had several miles back in the country My uncle was asked all sorts of questions by the wondering people he met who had not heard of the invasion

Another of my uncles found in the woods, in the vicinity of where the Fenians had been encamped, leaning against a tree a Fenian rifle with a knapsack containing among other things a Roman Catholic prayer book on the fly leaf of which was written in pencil "John O Neill his prayer book Holy mother for me pray, and take on my dying day my soul to Heaven"

Until I was seven or eight years of age when living one hundred miles from the Falls on our annual visit to grandfather's on the Niagara River, when passing by a bush along the road imagination would picture soldiers in rifle green as ready to pop out from behind the trees my young mind having been so vividly impressed by what I had seen and heard at the time of the Fenian Raid

One of the patriotic songs sung at that time a parody on "Tramp Tramp Tramp the boys are Marching" contained these verses (the only two I remember)

In a cottage by my side
Sits the darling of my pride,
And our happy children round us are at play
But the news spreads o'er the land
That the Fenians are at hand
And our country's call we cheerfully obey

Chorus

Shout, shout shout ye loyal Britons,
Cheer up let the Fenians come
For beneath the Union Jack
We will drive the Fenians back,
And we'll fight for our beloved Canadian home

Old Mahoney, needs some cash,
And he contemplates a dash
With his troops upon our soil to raid
But he'll find to his dismay
That the thing will never pay
And he'll wish himself off British soil again

In 1870 there was another Fenian scare and an attempt at invasion at Eccles' Hill, Quebec, when the 3rd Victoria Rifles of Montreal drove the invaders back over the U S A border I remember that year on our annual visit to grandfather's during the summer holidays, dragoons on horseback were constantly patrolling the river-road from the Falls to Fort Erie watching the frontier One day I was leading one of my grandfather's horses down to the watering place at the river, when I saw a passing Dragoon put his hand to his belt as I thought to get his pistol to shoot Timorously I let go the halter-shank by which I was leading the horse and hurried to the house My grandfather afterwards often laughed and joked me, for letting 'Old Boney' go down the road after the soldier

The foregoing childhood reminiscences only touch briefly on the history of the Fenian Raid that was only we may say the invasion of a day, but they show the feeling that it created among the people in the immediate locality and in Canada and the patriotic spirit that was roused by the occurrence all over Canada

PERSONAL EXPERIENCES IN THE FENIAN RAID

By Albert W Reavley, Gunner, W C F E

On the 31st of May the news was flashed over the wires that a large body of Fenians was assembling at Buffalo for the purpose, it was supposed, of crossing into Canada Next day events proved the report true A body of men variously estimated from 2,000 to 5,000 landed at Fort Erie They made a demand for provisions and received a supply from the village council The Fenians brought many more arms than they needed At Frenchman's Creek where they encamped the first night they burned the extra arms Early in the day they sent a party to burn Sauerwein's Bridge This, you will all know, is the G T R bridge near Mr M Sexsmith's

Meanwhile the volunteers were called out and rushed to the frontier and notwithstanding the fact that several regiments of regulars and two batteries of Royal Artillery were stationed at Hamilton and Toronto the volunteers were the first on the ground where the attack was made

The Queen's Own came by boat from Toronto to Port Dalhousie, and by the G T R reached Port Colborne about 10 a m On their way they picked up at Port Robinson one division of the Welland Canal Field Battery Later in the day the 13th Battalion of Hamilton and the York and Caledonia Rifles arrived The total strength of these corps was about 1,000 and the presence of so many caused a famine for two days

On Friday the Welland Canal Field Battery furnished a guard of twenty-one men to protect the construction party which repaired the Sauerwein Bridge This was a work of some hours and the party did not get back to Port Colborne till midnight At Port Colborne the three officers who were highest in command were Col Booker, 13th Battalion, Col Dennis, Queen's Own, and Capt Akers, Royal Engineers

(a) These officers received orders to patrol the Niagara River with the tug *Robb*, and prevent the retreat of the force already in Canada, and keep reinforcements from crossing The Welland Battery, Capt King and the Dunnville Naval Brigade were assigned the task It may be noted that Capt McCallum of the Naval Brigade was owner of the *Robb* They embarked at 4 30 a m on Saturday and with Col Dennis and Capt Akers with them started for Fort Erie

(b) Col Booker in command of the Queen's Own, the 13th and the York and Caledonia Rifles were to go by train to Ridgeway and march across to Stevensville and effect a junction with Col Peacocke, who had orders to march from Chippawa to New Germany Peacocke's force was made up of H M 16th Regiment of Infantry, a battery of Royal Artillery, six guns and the 19th Battalion, St Catharines, and Governor-General's Bodyguard A third column composed of H M 47th Regiment a battery of Royal Artillery and some volunteers was to move up the Niagara River, and there it was hoped the enemy would be hemmed in and finally disposed of

On the night of June 1st, an official of the G T R who had been at Fort Erie arrived at Port Colborne and reported that the Fenians were all drunk at Frenchman's Creek, that they were quarrelling and fighting with each other, and that fifty good men would put them to flight This report was true in all respects for it was stated that a boy was killed in a drunken fight This report had one very disastrous effect it led the volunteers to despise the enemy, so as to under rate their fighting power It also fired the officers with a desire to win the honor of beating the enemy before the regulars could get a hand in, and is in some degree accountable for Col Booker's rash haste the following day, and the failure to carry out to the letter, the orders received

We left the Fenians at Frenchman's Creek, near which they passed the first night They marched along the line between Bertie and Willoughby, heading it would seem, for Welland, with the object of destroying the canal or rendering it useless But before they got near to New Germany, they evidently learned the part that Booker's force was to take for Col O Neill changed his line of march and made for the Ridge Road, upon reaching which,

he followed it up to Bertie road where Athoe now lives. Here they halted and made preparations to receive Booker. They took the rails from the fence on the north side of the Bertie road and laid them slanting down towards the south, the upper ends resting on the top of the fence south of the road, and the lower ends on the ground. This made an effective barricade against the bullets of the Queen's Own. Here they waited for Booker.

None of the higher officers of the Fenians were known to have been in Canada. Neither General Sweeney nor O'Mahoney were reported present. The command devolved on Col. O'Neill who had made himself famous by the defeat and capture of the force of Morgan, the confederate guerrilla. Col. Bailey of the United States army was present and took charge of a part of the fighting line. On the march the Fenians had secured a few horses, on which their officers were mounted. It was the sight of these which caused afterwards the disastrous but false alarm of cavalry.

On the morning of the second of June, Col. Booker with his command took train at Fort Colborne and detrained at Ridgeway where he learned that the Fenians were waiting for him at the Bertie road. Sam Johnson offered to lead him to the enemy. The whole force lost no time in moving down the Ridge road, acting as some thought very rashly, and no doubt expecting an easy victory. Before the Canadians reached the Garrison Road, they found themselves in touch with the Fenians. Shots were fired by the Fenian pickets. The Queen's Own deployed on the Garrison Road, and the line of skirmishers advanced, and gradually drove back the advance posts of the enemy. A little before 9 o'clock Detective Armstrong galloped up with a message from Col. Peacocke, stating that he (Peacocke) could not move as rapidly as he had expected and that Booker should delay his advance and move slowly. This order was nearly an hour too late to prevent the action desired. In that hour several casualties had occurred. McEachren, McKenzie and Tempest had fallen and a number had been wounded. The main body of Fenians had been driven back from the barricade on the Bertie road. Many had given up the fight and were on their way to Buffalo. O'Neill's men alone behaved as soldiers. They were retiring in good order feeling that they were losing the honors gained in the defeat of Morgan. But

just then something happened which turned the scale in their favor The ammunition of the firing line was exhausted It was necessary to replenish it It was intended to have the 13th relieve the Queen's Own The York Rifles and one company were moved to the front There was some delay and then a few mounted Fenians appeared on the ridge north of the Bertie Road In some unaccountable way, an alarm "prepare for cavalry" was raised The greater part of the force formed into squares on the ridge road a little north of Elisha Teal's house One man was killed in the square and it was very fortunate that the nature of the ground and the numerous trees prevented the enemy from pouring in a destructive fire After this there was much confusion and many were panic-stricken A fact which need not cause great surprise, when we consider the large number of boys,—you could not call them men—who made up too large a part of the force This is especially true of the 13th In spite of all efforts of the officers, there seemed to be no possibility of getting all to make afresh attack A majority were willing to renew the fight but twenty per cent or less made off, and the majority seemed unwilling to make further resistance unless all did so Thus the action of the minority decided the action of the whole The Queen's Own the York and Caledonian Rifles retired steadily exchanging shots with the pursuing Fenians The writer remembers a private of the thirteenth who was wounded in the neck, and who was being helped along by two comrades, yet the wounded man wished to stop to fire back at the enemy, who were getting dangerously near The Fenians followed the retreating force quite into Ridgeway and after visiting the hotel marched back to the Garrison Road and after a time started for Fort Erie, where they arrived about six o'clock

The volunteers marched in straggling parties along the main road towards Port Colborne Not far from Shetkston they were met by a train composed of flat cars, which could not take on all The train went to Port Colborne and made a second trip for the rest

We now return to the *Robb* which had been sent to Fort Erie Col Dennis and Capt Akers took command They landed at Fort Erie, disembarked most of the hundred men and marched down the river They took many prisoners sixty-five in all, these being

camp followers who were heading for the American side. Some of these carried knives and revolvers and were of course disarmed. On the whole these were the worst looking lot of ragga-muffins to be seen outside of a penitentiary. These all matched as far as Black Creek, where all went aboard the *Robb*. The *Robb* with her prisoners arrived at Fort Erie a little before six o'clock. Col. Dennis ordered his men on shore at the lower ferry dock. He was preparing to billet his men in the village, for they had not had a meal since morning. A few had been fortunate in getting a drink of milk, or a small lunch at farmers' houses during the day. At this time Capt. Palmer rode in on horseback to warn Col. Dennis of the approach of the Fenians. He stated that they would be there in twenty minutes.

Capt. King proposed that they should pile a barricade of cordwood on the *Robb*, then go aboard, and keep the tug in the river and fight behind the cordwood. This suggestion was not acted on and in a short time the Fenians appeared along the top of the ridge that overlooks the village.

The Naval Brigade faced southward on River Street, one block south of the lower ferry wharf, where the Robb was moored. They were near the corner at which stood Russell's machine shop. The Welland Battery was posted a few yards from the Naval Brigade facing to the west. Here these two companies were placed and allowed to stand doing nothing to hurt the enemy and nothing to protect themselves. The Fenians extended along the ridge, some of them partly concealed in an excavated road. Still Col. Dennis gave no word of command, but, looking down his nose left his men to become targets for the enemy. A mounted Fenian officer waved a white handkerchief, inviting the little party to surrender. And yet there was no move or word of command from either Dennis or Akers.

Then the suspense was ended by the Fenians opening fire. At this stage it was clear that Dennis would not do anything to give his men a fair chance to fight, nor help them to escape from so unequal a foe. Instructor McCracken of the Royal Artillery said to the men of the Welland Battery, "Boys, you had better take care of yourselves." This suggestion was at once acted on by both the Naval Brigade and the Battery and amid a hail of bullets the

two companies made down street towards the *Robb*. But the Captain of the tug finding his prisoners getting troublesome, and fearing that the tug might be captured, cast off his lines and let the tug drift with the current. Some of the battery followed down the river bank, made good their escape. Sixteen of these besides Capt. McCallum were taken aboard the *Robb* and started for Fort Colborne. As they passed up stream past Fort Erie, they received a heavy fire from the Fenians, the man at the wheel having a very narrow escape.

But to return to those on shore, some who were too late on the dock to board the *Robb* jumped into the river and climbed upon the timbers beneath the dock and remained there all night. Others went into the Lewis house and from the upper windows fired upon the enemy. Col. Bailey, U.S.A., and his horse were victims of these. Soon the Lewis house was closely beset and the walls were riddled with bullets, which caused an intollerable dust from the breaking of the plaster. The Fenians ordered the occupants of the house to surrender, or they would burn the house. This demand was complied with and about thirty laid down their arms.

In this short fight there was some hot work. Before the evacuation of the Lewis house, Capt. McCallum and others of his company, came out of the house. A Fenian pointed his rifle at the Captain, but one, Thewlis, who stood beside the Captain, pushed his bayonet through the Fenian's neck, and saved his Captain's life. One member of the Welland Battery, who was a good shot, took shelter behind the pile of cordwood on the wharf and from this place he fired into the crowd of Fenians as they came down the street. A little later, when a prisoner, he was marched past the place, at which he had been firing and noticed five or six killed and disabled on the ground.

It seems a wonderful circumstance that with a force of ten Fenians to one volunteer, and at a distance of little more than two hundred yards, there was not a single fatality on the side of the volunteers. five wounded was the total. Of these Captain King, John Bradley and Fergus Scholfield had legs amputated, the others having flesh wounds. During the rush for shelter, any hiding place whatever was utilized, Chicken-coops, pig-sties, etc. Col. Dennis found his way to Dr. Kempson's ash-house, from which he

reached the kitchen, where he found sympathy. A kind-hearted domestic was willing to part with some of her outer apparel, in a case of such dire necessity. But the Colonel's whiskers did not harmonize with the proffered garb. What was to be done? Must such a gallant pair of whiskers be sacrificed? Even so, a razor was loaned and with the disguise effected, the Colonel made his escape under cover of the darkness and as they say, saved his bacon.

A number of King's men had gone into the Lewis house and poured an effectual fire upon the Fenians. Among their victims was Col. Bailey already mentioned, of the U.S. army, who lived till the following morning. His horse was shot from under him at the same moment that he was struck. The Fenians had surrounded the house and riddled it with bullets. The Fenians then ordered the party in the house to surrender, or they would set fire to the house and shoot every man as he came out. It was useless to fight so great odds and all, 30 in number, laid down their arms. In this action the loss of the Fenians was estimated at ten or more killed.

Those taken as prisoners by the Fenians were marched up to the old fort where they received a slice of raw pork and some soda biscuits for supper.

At about 11 p.m., Col. O'Neill collected his men and made an appeal for followers, as if he had in hand some desperate undertaking. He and his braves were away for a period of two hours. It is the firm conviction of many that he intended to surprise Peacocke's camp, but finding the latter's guards and pickets wide awake he abandoned the attempt. This belief finds corroboration in Col. Denison's narrative which states that the outposts of Peacocke's force heard those sounds, familiar to experienced ears, which indicate the proximity of a large force. On O'Neill's return to his prisoners he had them drawn up in a line as if he intended to have them shot. Some of the prisoners thought they were to be shot and told O'Neill that the *Rebb* had a large number of Fenians—twice as many as he. O'Neill, had of Canadians and that if anything were done by O'Neill to his prisoners, not a Fenian prisoner would be allowed to live. O'Neill's demeanor at once changed and he made preparations to embark.

About 1.30 a.m., a tug and scow came from Buffalo and took on board the militant part of the invaders. It would seem that

the Americans had kept a close watch on all that was being done, for the scow had hardly crossed the boundary when a shot from a swivel gun on the U S warship *Michigan* compelled the tug to stop The scow with its cargo of adventurers was taken in tow by the *Michigan*, awaiting for some days orders from Washington I believe that the greater part of Fenians made their escape from the scow, while the authorities at Washington were deliberating on the course to pursue

The prisoners taken by the Welland Battery and Naval Brigade were taken to Toronto and held for trial at the Fall court, four months later During this period of waiting a wonderful transformation in the appearance of these men took place When captured, all were sunburnt, dust covered, unshaven and unkempt Nearly all wore tagged clothes, while, most conspicuous for the accumulation of dirt were shirts which showed no sign of ever having been in a wash tub All this was changed by prison discipline and the sanitary conditions enforced thereby There was none of the squalor so noticeable when captured On the whole, with the loss of tan and the addition of prison uniform, identification was impossible in the majority of cases Those making the arrests could not swear where they had seen them As a result, nearly all were set free, less than a dozen receiving sentence of life imprisonment

In 1872, the six then at Kingston were set free, much to the chagrin of the volunteers To add to the annoyance of the volunteers, each Fenian received free transportation to Niagara Falls, and in addition a five dollar bill, with which to celebrate his liberty and make merry with his friends

The writer was a member of the Welland Battery, but was present at Lime Ridge, with two others of the same corps, and having been a spectator during the early part of the action and a participant when the Caledonian Rifles went to the front, he can speak positively as to what actually took place on the field The facts relating to the action at Fort Erie were gathered from the writer's father, and from officers and comrades who were present

I have spoken of the annoyance felt by the volunteers on account of the leniency shown to the Fenians who were made prisoners A much stronger word than annoyance would be needed

to express the feelings of volunteers who had been in active service when the government of old Canada gave a five dollar bill to each Fenian set free in 1872. This unwarranted liberality was the less justifiable for the reason that the volunteers never received a cent more than their scanty pay, thirty five cents per day. And the privates who were wounded received almost nothing. John Bradley, whose leg was amputated close to his body and who was completely disabled for life received something like thirty-five cents a day. Fergus Schulfield who had his leg amputated below the knee received twenty cents per day. We are pleased to note that a more worthy appreciation exists today.

Lessons of the Raid

The Fenian Raid was a great shock to the people of Canada yet it was not without its useful lessons.

It proved that Canada however well-behaved, was liable to attack thus demonstrating the need of defence, and what was still more important the need of unity.

For two years, the best men of Canada, including the leaders of both political parties, had tried in vain to bring harmony out of chaos. We had had a "deadlock" in parliament. Our representatives had not been able to pass any legislation. Various attempts to form cabinets had been made by different leaders, without success. Stability was entirely lacking. The Brown-Dorion government lasted only three days.

Following two conventions of the Fathers of Confederation, the raid gave a decisive impulse to the union movement.

Our leaders realized that party bickerings must cease before we could work out our destiny, that only through unity, harmony and co-operation could the foundation be laid. True, we have united the provinces with a girdle of steel, to further our commercial interests, yet much more is needed to strengthen our sense of national and Imperial unity.

RECOLLECTIONS OF THE FENIAN RAID

WRITTEN BY N BREWSTER, M D , IN 1911

As the general history of the Fenian invasion is well known, I will confine myself to what came under my own observation

In the well-remembered morning of the 2nd of June, the inhabitants of the village were attracted by the sound of whistling from a train from the west, the first in two days, and we soon learned the troops were here We had earlier learned by carrier of the approach of the Fenians from the north

Profiting by my three years experience in the great Civil War in the U S A where I was often in battle, I soon learned our soldiers had nothing to eat since the day before and I went along their line of march and asked our people to bring out for them all the cooked food on hand

They responded liberally, and so, many of the soldiers got at least a lunch

I never learned who was in fault, but surely some one blundered, that men were sent into battle without food in this part of the country

About an hour after the troops marched away, the sounds of battle so familiar to my ears, were heard, and I again went among the people and told them there was fighting going on down there, and there would soon be wounded to care for, and advised them how to prepare for their reception

I then gathered up such of my surgeon's outfit as I had left, namely instruments, bandages, adhesiveplaster, chloroform, a canteen full of whiskey, another of water, and started for the front Just at the bend of the road to the north of the village I met such a mixed and confused mass, as I have never seen elsewhere before or since Soldiers and citizens, men, women and

children on foot and in all varieties of vehicles, with horses, cattle, sheep and pigs, all mingled together, and all hurrying along the road south. It brought to my mind Russel's description of Bull Run.

I saw two soldiers without guns, running, and close behind them an officer with revolver in hand, crying halt, and firing in the air occasionally, but running as fast as he could, and close behind him, more soldiers running.

Soon after I saw that some of our men had taken possession of the buildings on the corners at the first cross road north of the village, then owned by old Mr. Joseph Danner. Uncle Joe as he was called, and were gallantly trying to hold the enemy in check, and how I wished there were even a few veterans tried in battle among them, to hold them steady, but it was not long until I saw wavering among them, and soon they broke and continued their retreat.

Being now in the line of fire, I hastened to the left and made a circuit around the contending forces to the rear, and while in the fields, I heard shouting and firing, but paid no attention, until I heard bullets whistling over my head, the other being the ordinary noises in battle. Then I observed they (the Fenians) were hailing and trying to halt me, and call me in. I was soon among them, and a prisoner. I was surprised to see that the only ones among them in any kind of uniform wore that of the U. S. army. A Captain among them wore the full fatigue dress of his rank; who being asked why he had that on over here, he said he had not taken it off since the war. I told him it was time he did, as this was no place for it, and that I thought too highly of that uniform to see it worn in such a cause, as I had myself worn it for three years.

The Canadian soldiers retired through the village, and so on to Port Colborne and we saw them no more.

The Fenians took possession of the village, and anything else they wanted, posted their advanced picket at the cross-roads, on the hill west, then they settled down for rest and food, in some cases cooking and eating their dinners in private houses, even setting the table in my own house. They took very little food beside food and did practically no damage to private property.

After waiting about three hours for orders or news, they retreated toward Fort Erie, and we saw them no more.

The Captain I have mentioned, on learning my profession and object, sent me on to the field, saying I was needed there, and that I should call on any Fenians I met for assistance, and I did so freely I scoured the fields, roads and buildings, gathering in the wounded, all of whom I cared for, taking their names, rank, company and regiment on my list, recording alike friend and foe, and at the conclusion had twenty six names on the list, which I regret to say is lost

Of these two Canadians were dead, and there were four Fenians dead, whose names I could not learn

One of the Canadians died from heat and exhaustion in my presence, being not wounded, a student of the University of Toronto and a member of the University Rifles—brought in from the field while still living

Of the five houses used as shelters for the wounded, but two remain namely Mr Arthoe's and Mr Pierce's One stood where Mr Benjamin Weaver now lives, one at Mr Burt's, and one the Smuggler's Home hotel has not been replaced

One of our wounded officers, thinking he must die, gave me his sword and belt, gold watch, rings, etc, and exacted a promise from me, that I should visit his wife, be the bearer of certain farewell messages giving her all but the sword and belt, which I was to keep

I afterward had the pleasure of returning all to himself in his wife's presence except the messages

A passing Fenian saw the sword and tried to take it from me, but I secured the assistance of a guard, left on duty by their commander, who drove off the marauder, and I concealed the sword

Our troops marched down the Ridge Road to the Smuggler's Home, on the corner formed by the Ridge crossing the Garrison Road, where they deployed into line reaching to and into the bush on the east, and a few rods below the hill on the west, and advanced across the fields and along the road to the north They soon met the fire of the advanced Fenian pickets hidden in a clump of bushes in mid-field, which has only lately been cut down I was told by our men that they were driving the Fenians back to their main line, and doing well, cheering as they went, sanguine of success until the fatal blunder that ordered them into squares to resist,

cavalry, which they obeyed, but instead of cavalry they found a line of veteran infantry, trained to service in many hard-fought battles in the American War, facing them, who were quick to see and profit by the false move. They tried to get again into line, but being pressed, fell into disorder, then broke and began their retreat. The extreme right continued to advance and occupied a part of the enemy's breast-works and in their retreat a number of them being cut off from the main body, continued easterly until they reached the lake near Windmill Point.

I was assured by men living along the line of the Fenian march from Black Creek that there were but two mounted men in the Fenian ranks, and I could not but reflect upon the fitness for command of a man whose excited imagination could multiply two mounted men into a troop of cavalry. I was assured by many of our men, officers as well as privates, that all was going well, and they were sanguine of success until that stupid order to meet cavalry which they saw did not exist, threw a pall on their spirits, and I have not spoken with one of the participants since, who did not believe that was the cause of the disaster.

As to the number engaged, I estimated the Fenians a little more numerous than the Canadians, and a very large percentage of them were seasoned veterans, used to war and battle, while ours were to a man, raw recruits, not one of them had ever before heard the whistle of hostile bullets or as the phrase is "smelt powder."

The phrase "shot in the back" has a tinge of disgrace in it, but not always justly so, for on this occasion Ensign McEachren of the Queen's Own, observing that his men while crossing the fence and fields were in disorder, stepped boldly out in front, and turning and facing the men was trying to get them in line again, when he fell, dangerously wounded by a ball in the back, and which passing within an inch of his heart, came out in front. He recovered and was living a few years ago and I have seen no report of his death.

I have never seen the Fenian loss reported, but I have four found of their dead, and learned from people living on those roads that at least six wagons carrying dead and wounded were seen going toward Fort Erie, but I have never heard the number estimated.

Some of our less seriously wounded were helped in the retreat by comrades, and given rides by our fleeing citizens, and I did not see them, but they were all properly reported

The Fenian line was formed along the cross road by Athoe's, and they took the rails from the north fence, and placed them on end on the ground and the other resting on the south fence, and so constructed a very fair breast work and defence

A home guard was formed here in the afternoon of the day the Fenians came over, with E. Morris, Esquire, now of Fonthill, as Captain, and mounted men, armed, patrolled all roads north and east all night and moved west with the retreating troops, but returned and again patrolled the roads east, with a good degree of efficiency, a fact brought home forcibly to myself, as they twice halted me on my rounds

A good joke was circulated about them and their retreat, to the effect that they established their headquarters in the marsh west of the Welland Canal, to assist in its defence, doubtless they would have given a good account of themselves

Very few of the inhabitants of the village remained in their homes but went with the crowd, and so gave the Fenians full liberty, but they took very little from the houses, chiefly handkerchiefs, stockings and little items to keep as souvenirs From mine what I most highly prized was the gold lace and insignia of rank from my uniform which I was keeping as a souvenir Probably someone has it for that purpose now

An object of interest to the many visitors to the battlefield was for many years the marks of the bullets, on the brick walls of the Athoe house

A ROMANCE OF THE RAID

By George Wells

Every war has its stories of love and romance, and the Fenian invasion on the Niagara Frontier in 1866 was no exception to the rule. This story as published below, was discovered while rummaging through some old files of the *Welland Tribune* and is dated May 2nd, 1867. There is no signature to the story with the exception of the word "Post" as if copied from another newspaper.

A singular case of elopement occurred in the Township of Bertie about a week ago which affords another instance of the proverbial blindness of love and the hasty ill-advised actions which those influenced by the tender passions of love will, at times, be persuaded to adopt. In order to fully understand the affair, we shall be obliged to refer to the events of the Fenian Raid of last June, in which the hero of the present narrative took a conspicuous part.

Patrick J. O'Reilly of Buffalo was a Fenian. He was a discharged American soldier, a saddler by trade, and an active and not bad looking young fellow, of twenty-four years, or thereabouts. Either from mistaken patriotism, love of plunder, recklessness, or as Artemus Ward has it, 'pure cussedness,' P. J. joined the Fenian invaders, and on account of his military experience, obtained a lieutenancy. He participated in the battle of Ridgeway, and at the close of the fight received part of his deserts in the shape of a ball in the side.

Abandoned by his pusillanimous comrades, he followed the retreating Fenians for some distance, but at last faint from loss of blood, had just sufficient strength remaining to crawl to the door of a farm house, about four miles from the Niagara River, and begged to be cared for and concealed from the red coats. The men

of the family were away from home at the time, looking after some horses which had been stolen by the Fenians—in fact one of the daughters was the only person left about the place Taking pity upon the condition of the wounded man, and knowing that if her father and brothers found him in the house he would at once be handed over to the military authorities, she concealed him in an old disused barn at some distance from the house, assisted him to dress his wounds and supplied him with food for about a week and until he was able to travel

By her guidance, O'Reilly then succeeded after much difficulty in outwitting the vigilance of the sentries and escaping across the river, probably considerably benefitted by his Canadian experience While the foolish girl had thus from a mistaken idea of sympathy, been conniving at the escape of a criminal worthy of severe punishment, and, unluckily for her, her compassion changed to love—probably sincere, though sadly misplaced

After the departure of O'Reilly, she settled into a deep melancholy, and her friends predicted an early death from consumption Nothing was heard of the escaped Fenian until some time later, when an individual of much the same description—apparently a pedler—called at the farm house in the evening and asked for a night's lodging His request was readily granted and he accordingly made arrangements for passing the night there, retiring early

When the morning dawned, however, the pedler was gone—and the young lady also The latter had been observed to be much affected and unable to conceal her agitation on seeing the stranger the previous evening A couple answering their description were seen driving rapidly towards the Suspension Bridge on the morning they eloped, and a Buffalo paper a day or two afterwards contained the announcement of their marriage in one of the Catholic churches in that city

The parents and friends of the girl are, of course, much grieved at the course she has pursued, and the unfortunate alliance she has formed For this reason we suppress all names but that of the bridegroom

We only hope the silly girl will never have cause bitterly to repent the match she has made

SAM JOHNSTON, SMUGGLER SOLDIER AND BEARER OF NEWS

By Louis Blake Duff

Mr M. O Hammond, who is the able "Bystander at the Office Window" of the Toronto Globe lighted a fuse a year ago that was to illumine a curious and interesting incident of the Fenian Raid and in call up from well nigh forgotten memories a most interesting and picturesque character long since passed from the local scene

Mr Hammond, while making one of those excursions of his in the wake of a camera, had heard a legend that one Sam Johnston had galloped up on that June morning, bringing to Col Booker and the detraining soldiers at Ridgeway, news of the approach of the Fenian invaders Mr Hammond was curious as to the authenticity of the story and if it was true he wanted the facts He wrote me a letter and as a result of it I published a brief article in the *Tribune and Telegraph* designed to uncover the ore if there was any

Many letters followed from correspondents in the Ridgeway section and the general opinion seemed to be that Sam had long since joined the angels The first suggestion that he was still wearing coats and shirts came in an anonymous letter from Stevensville Here was the message

Sam Johnston
Rock Creek, B C
"This is Mr Sam's address and he is very much alive"

A letter was sent to the address given and brought back an immediate response from the redoubtable Sam That response was as follows

SAM JOHNSTON

Erstwhile Soldier, Sailor, Smuggler, Customs Officer
Now a Gold Miner at Rock Creek,
British Columbia

SAM JOHNSTON
A picture taken when he was a young man

Sam Johnston's Own Narrative

In answer to your request of 3rd inst In the first place on Thursday night I was stopping at a hotel in Fort Erie about midnight Two parties by the name of George Nettle and Geo Stevens routed us up and told us a diamond trader from the American side notified them that the Fenians were landing their arms at the Blast Furnace dock, to cross to invade Canada and a body of men had marched down on us So later I heard a horse coming up the street I looked out and it was Corporal Nolan going to the Grand Trunk to notify Ottawa I at once notified a family on the Garrison Hill, came back and took a double barrelled gun into Grant Watren's store and asked them to load it for me I struck back across the commons and routed another family I later met Mr Dennison in company with John Douglas of Fort Erie

To get back to the front street, the Fenians were to pass around a bend in the river and they gave me quite a fusilade The bullets flew round me pretty thick I noticed a picket fence ahead of me and I made for it, and they ceased firing I struck out to the upper end of the town and ran under the old railroad dock and passed under it until I reached the lower end They were about a hundred feet below me I stood under the dock and took an estimate They were marching eight men to the column across I counted the columns and there were one hundred and thirty-six At that rate there were one thousand and eighty-eight men

When they passed I ran back up to the old mill race and crossed on Douglas's Hill The Fenians were forming on the commons below I happened to drop my eyes to the bottom of the hill and I spotted two Fenians at the bottom with rifles and fixed bayonets I struck back across lots until I came to Henry Benner's He had his team hitched up and the family was moving out I told him I wanted a horse He told me to take one She was of Kentucky stock I had the best bred horse in Welland County

I went on out to Stevensville and got a doctor to go forth My brother William started to go out the Bowen Road The Fenians were located at the mouth of Dutchman's Creek on the new Ryan farm On the way out Willson Bowen went with us mounted and Henry Bowen followed on foot When we got to where the railroad crosses the Bowen Road we could see a heavy picket about a quarter of a mile ahead We halted and pretty soon a picket of two men, mounted and two men on foot with rifles approached within a hundred yards I halted them and I asked them who they were and what they wanted The reply was they were Fenians and they were going to take Canada With that the two men on foot charged their rifles I told the parties with me

that we had better get They would take our horses as they were armed and we were not So we dropped back to Stevenville, and in the evening John Richardson went with me

We went out the Bowen Road We got close enough at times to hear them talking All night they moved down the river We kept on their track and in the morning, at Buck's Corners I stopped to get my revolver oiled in at the Main Street A John Donahower and another party struck for the bush, and stated they were coming through the cedar swamp I struck for the cross road leading south When I made the turn I saw one of their horse's noses They ran me to Emerick's Hill but my horse left them at every jump Their main body was pushing on in the direction of the Ridge Road My comrade Mr Richardson jumped his horse across the fence and struck for the bush I rode right direct to Ridgeway I crossed the rail road between the pilot of the locomotive and the locomotive with the nine cars of volunteers They detrained on the north side of the train I passed on to the north side and met James Morin, father of Colonel Morin I asked which was the Colonel in command I then approached the Colonel and asked if he was in command He said he was and I told him the Fenians were within two miles of us and coming this way The first question was "Have they any artillery? I said No He then asked if they had cavalry I said No and told him they had some men mounted but didn't have saddles and carried no swords He asked me how many men they had I told him fifteen hundred I spoke to him then and used these words "Why not ambush them?" He wore glasses and instead of looking through them, he looked over them, with the expression, "Are you in command or me?" He then asked if there were a Magistrate present Squire Peter Learn standing behind me threw up his hand and said he was one He asked him if he knew me and he stated he did He asked if he could rely on my report He said he could He asked him then to go out and see what he could see and with his son Alanson went out mounted

In less time than five minutes the bugle sounded It was a very still morning You could hear it for several miles The Fenians were at that time a half a mile north of the Bertie Road They marched to the Bertie Road and took up a position on the Bertie Road crossing the Ridge Road where they had a stone fence At the same time they had John Anger's brick house on the corner, and across the road on the opposite corner a big high log barn

When I asked Colonel Booker to ambush his men on the north side of Ridgeway, there was a big pine bush running east and west and a rail fence running the same direction and about two hundred yards above the Ridge Road there was a thicket of pine balsams, where one battalion could quarter

The Fenians had no idea of meeting the volunteers there They expected to meet them on the Welland Canal

It was the Welland Canal that was their object They collected at the Garrison Road The Fenians picket was on the Garrison Road and it was there that the battle commenced They drove their pickets in and across to their main body, routed their main body

The Fenians took up their position on the line fence between the Stoneman Farm and the Huffman Farm, leading east and west

When they took that position they had a number of horses parked at the brow of the ridge, probably 20 When they fell back to their second position, for every horse that they had there were three or four men Colonel Booker seeing this move, sounded the retire thinking they were going to make a cavalry charge Booker sounded the retire and formed two solid squares to receive cavalry The squares were not any more than formed when three men were knocked out of one of our squares Booker lost his head and sounded the retire The Queen's Own and 13th Battalion dropped back to Ridgeway and Port Colborne west The Fenians followed up to Ridgeway and then dropped back to Fort Erie in two bodies one down the railroad and the other body by the Garrison Road The body moved down the railroad with the intention of capturing the International Steam Ferry But Captain May sighted them and steamed over to the American side, the body passing down the Garrison Road When their rear body passed Lewis Palmer's place a very old man struck across to the Bertie Road and then to Fort Erie and notified Colonel Dennis who was in command of the Welland Field Battery and Captains King and McCallum who had been landed in the morning All told they were fifty-six strong of both companies Colonel Dennis ordered them up to the village school house, where in the morning they had captured 85 Fenians prisoners Camp followers and such, they brought down to the tug *Robb* and put down amidship under the deck

Leaving nine or ten men on board of the *Robb*, he lined them up on a cross street Then he had to go to see Dr Kempson, the Reeve of the town The Fenians were circling on the brow of the Garrison Hill and commenced firing on this body With that Captain King ordered the men to take shelter and fire as the Fenian horde came down on them They captured 22 prisoners in Lane's house and marched them to the old fort as prisoners of war Captain King was wounded and John Bradley, a man by the name of Hardison and a man by the name of Schofield These I was acquainted with and I think fifteen others There were several Fenians killed on Sunday morning at Fort Erie I was standing on the sidewalk and could feel the planks jiggle I thought it was a boy and didn't think any more about it But all at once I

saw a man crawl out and I took a scrutiny of him and he had as fine a map of Cork as I ever saw and I nailed him This same June 4th on Monday I was taking dinner at a hotel and there was an old Scotchman came in and called the Mistress in to an adjoining room and he requested her to let him have a boat that night to take a Fenian over the river He said he wanted to get the devel away I could overhear the conversation and I at once went out and notified two soldiers and went and got him The following day I received word that one Michael Shea was wanted and I went into his place When I went in he was sitting at a little cubbyhole and he jumped back from the hole and struck on the lathing He came right through lathe and all and I took him down to head quarters He had a horse and wagon and had been out foraging with a Fenian Corporal and guard among the farmers for supplies, for the Fenian army But he showed he was forced and was given his liberty A day or two later I heard there were two deserters out of the Regulars and at once I struck out up the lake shore When I got up about three miles I noticed a man ahead and I struck out for where I thought I would meet him There was no man there It was after dark I noticed a rail fence running north from the road I jumped over it and followed this fence a short distance and spotted him I crawled over between the riders and nailed him and took him back to camp When I got a short distance from the picket I met the other fellow between two colored ladies The colored ladies had furnished him with a suit He spoke to the fellow I had and the fellow simply was I am gone I rushed this fellow in to the picket and struck back after this other one and another party got his hand on him about six inches ahead of my hand They were court marshalled and got either three years and three months or four years and three months They could have been shot for deserting in front of the enemy Now I go back to Friday morning Friday morning at 8 30 the United States Revenue Cutter *Michigan* ran down the rapids with Old Glory floating to the breeze with orders to anchor at the bridge and not to let any more over and not to let them back, and at the same time they took a piece of the *Michigan* and mounted it on the deck of the tug *Harrison* Then the tug *Harrison* patrolled the river When they made their get away they jumped a Canadian wood barge in Buffalo and poled her to one of the ports and got a tug that was up there to hitch on and tow her over to Fort Erie There O Neill had his force on the dock ready to board They boarded this barge, landed his twenty two prisoners shook hands with them and said good-bye stating he would come again

As the tug scurried out in the stream the tug *Harrison* fired a shot across her bow and they were taken down astern of the *Michigan* So it was settled between the U S Government and the

Imperial Government and Canadian Government as to what to do with them They were landed after and shipped to their homes New York, Boston, New Orleans, Saint Louis, Chicago, Cleveland and such There were thirty thousand in Buffalo ready to cross Their arms were stored in a Buffalo building and a number of years later it burned down with thirty-one thousand stands of arms in it

This ended the campaign of '66 I was qualified in this way First day in 1861, I went into the quarter-master's department, Washington D C , and on the first day of April, 1864 was transferred to the army of the Potomac then lying on the Rappanhannock in front of Lee's army and attached to the 50th New York Volunteer Engineer Corps It was attached to the Second and Fifth Army Corps under the command of General Warren of the 5th, and General Hancock of the Second, and Sheridan's Cavalry

I saw all the movements of the army of the Potomac and Sheridan's Cavalry during Grant's campaign This qualified me for the position I took in 1866 as Scout and Guide

I could have taken one hundred men that morning, say fifty of the Queen's Own and 50 of the 13th and cut them to pieces and no doubt captured the whole bunch I often saw men under fire, but I never saw men stand better than they did

The time I was dismissed from the Customs the Anger brothers at Niagara Falls were in conversation with Dr Ferguson and Dr Ferguson admitted to them that McKenzie Bowell, Minister of Customs said I was the most efficient officer on the force and was very much opposed to my dismissal If the Anger brothers editors of the Niagara Falls *Review*, are living, there is no doubt they will recollect the same

This leaves me a prospector at Rock Creek B C , in my 81st year

SAM JOHNSTON, EIGHTY-ONE YEAR OLD HERO OF THE FENIAN RAID, NOW LIVING IN HUT AT ROCK CREEK, B C

BALMORAL CASTLE IN THE ROCKIES

R A McKelvie in a recent article in the *Vancouver Province*, which has been widely copied, gives some interesting details about Sam Mr McKelvie writes—

In a hole scooped in the gravel near the river at Rock Creek, thirty-five miles from Grand Forks, B C lives an aged man His hut is not as large nor comfortable as the keewillies—or underground habitations—which the missionaries induced the Indians to desert half a century ago The walls are composed of old scraps of driftwood, broken mine timbers and bits of packing cases while

the roof is made of several old rusted pieces of corrugated iron, one of which is removed during the day to serve as a doorway and window. A farmer might use such a place for a root house but he would refuse his stock in it—and yet it is the home of one of the nation's heroes. Canada's Paul Revere.

Sam Johnston, still sturdy of build despite his 81 years, with keen penetrating eyes that flash with animation when he recalls the days of his adventurous youth, and a full deep throated voice and merry laugh, is the occupant of this burrow. While time has failed to gain the full advantage of four score years, fortune has dealt unkindly with him. The $15 a month pension he receives from the government is all the money he has for food and clothing. And he never complains of what fate has done to him.

Canada is commencing to study her traditions. Historical sketches are springing up throughout the Dominion, and the story of the country is being examined by students, who see in the past a wealth of romance and wonderful power of inspiration. It was this new interest in the memories of other days that brought once more to light the part played by Sam Johnston when the Fenians raided across the border from Buffalo in 1866. Toronto papers gave publicity that the meagure scraps of information that could be gathered from the scattered survivors of those stirring times about old Fort Erie, and historical bodies discussed the incidents of the affair. But what had become of Sam Johnston?

Columns were written about Sam and his picturesque past—soldier, sailor, smuggler and customs officer in turn—but nothing definite could be learned of his movements the last quarter century until Sam himself wrote from Rock Creek denying much that had been said about him.

Possessed of a remarkable memory, a ready wit and keen sense of humor, he is a general favorite about Rock Creek. Little children and men and women treat him with respect, deplore his misfortunes and express appreciation of his character. Well read, his advice is often sought and his opinions given consideration on matters of discussion.

From the store house of his memory, beneath the willows that shade Balmoral Castle, as he has dubbed his hut, he recently told the writer the story of that day in June, fifty nine years ago when O'Neill and his wild Irishmen set out on their hare-brained expedition to capture Canada.

I was at the hotel in Fort Erie, he explained, when word came to me that the Fenians were loading arms on a boat at the blast furnace dock at Buffalo.

There were so many rumors going the rounds that I did not pay particular attention to them but still I did not feel easy. I went to my room and several hours later, about 1 o'clock in the

morning, I heard the beat of a horse's hoof and looked out and saw a mounted man Then I knew that there was something to the story.

I hurried out of the hotel after giving the alarm, and ran up the hill to warn a family living there Then I turned and ran back across the common to tell another family As I turned to retrace my steps I saw the Fenians coming They were about two hundred yards from me They saw me and opened fire Three bullets cut through my clothing, one grazing my right arm

I knew it would be of no value to find out how many there were, so, knowing the country better than they did, I ran turning and twisting, until I was out of range Then I doubled back and hid beneath a railroad trestle which I knew they would pass There I counted them as they came by only a few feet away They were marching in 13's ranks of eight men each

About three miles away lived a man named Benner who had a fine Kentucky blooded horse the fastest in the country I made my way towards his farm, warning everyone along the way I told Benner about the Fenians and asked him for a horse, saying I wanted to carry the news along the roads and to the soldiers He at once gave me Tib the Kentucky horse, and away I started

I was joined a little later by my brother and two other men Soon we came on a Fenian picket of two mounted men and two on foot We halted about two hundred yards from them The dismounted men had fixed bayonets I called out, Halt, who are you? What do you want?

"We are Fenians, and we've come to take Canada, was the answer

As they gave answer the two men with muskets started to load, so we turned and went back I was the only one armed, I had a big American army revolver but it was rusty

We got round to the flank of the main bunch, and we kept scouting about them until morning was well along I was getting my revolver oiled by a blacksmith at a crossroads shop when I looked up and saw ten mounted Fenians behind me and three in front I jumped on my horse and made a dash just as they tried to get me

Up a hill we went, my animal running away from their slower beasts Why they didn't shoot me I don't know for I was close enough They did fire, but while the bullets whistled around me, none hit me or the horse either

As I reached the railroad track at Ridgeway the pilot engine of the troop train was coming in, followed a few yards behind by another engine with nine cars full of troops I took a chance and headed for the tracks pressed my knees to Tib's side and the horse cleared the tracks at one bound, right between the pilot engine and the one following

A few minutes later, Sam said, he had told the colonel in command of the incoming troops that the Fenians were within two miles of the town. Both sides lost several killed and wounded in the battle that followed. The Fenians later in the day seized old Fort Erie, which had not been used since the War of 1812 or thereabouts. The Fenians, however, wired all over the world that they had invaded Canada and had captured Fort Erie. They didn't tell what it was like, and people who did not know thought it was a second Gibraltar.

A newspaper reporter got the Fenians out of Canada. He was from a New York paper and he went through the lines to the fort and told O'Neill that five thousand Canadian soldiers were coming.

The Fenians then went out, captured a barge and tug, loaded their men on the barge, released their prisoners and sailed away. O'Neill was arrested by the United States marshall when his army crossed back into the United States.

That did not end the war, however, for Sam Johnston, for the Fenians learned of the part he had played, and sent word that the next time the Fenians invade Canada they will bring your head back to Buffalo on a pole.

Several years later Sam went to work as a driver on the horse cars at Buffalo. There was a notorious Fenian bully named Jim Lyons, a man who weighed 248 pounds. He threatened that he would get the young Canadian, but Sam was a considerable fighter himself in those days.

This particular Fenian attacked Sam on the car one night and got the surprise of his life, for Sam floored him.

A few days later, with eight companions, he lay in wait for the driver at the end of the line and attacked him. In the fight which followed, Lyons received such a pummeling that he died from the effects of his injuries a few months later.

Many an exciting tale Sam can tell of the old smuggling days on the Great Lakes. Whisky could be bought for one or two shillings a gallon in Canada and sold for several dollars in Buffalo, while coal oil purchased in Buffalo for 4 to 8 cents brought three or four times as much in Canada.

When the national policy was introduced and the Canadian customs was enlarged, Sam was appointed inspector for his district. He is proud of the record he established during the three years and ten months he wore the uniform of the customs and of the seizures he made.

Sam Johnston came to British Columbia in 1898 and for the last twenty five years has been mining in the interior. He lost his savings in an attempt to recover gold from the Kettle River, just above the mouth of Rock Creek. For many years he had

leases on the river beach He still thinks there is gold in plenty in the creek which escaped the miners of the 60s, when Rock Creek had a population of five thousand Today less than a dozen houses make up the community And one is Balmoral Castle, where lives the hero of Ridgeway

SAM JOHNSTON'S RIDES REMEMBERED BY AN ONLOOKER

THE writer is indebted to Brig Gen E A Cruikshank of the Historic Sites and Monuments Board of Canada Ottawa for the following letter which contains interesting reference to the part played by Sam Johnston in the Fenian Raid

I well remember the first time I saw Sam Johnston It was on the morning of 1st June, 1866 I was then not quite twelve years of age When I was aroused that morning from a very pleasant sleep by my father about six o'clock he informed me that the Fenians were over and he wished me to go with his ploughman John Benner and take away his horses, of which he had about a dozen, to some place of safety We took a very hasty breakfast and set off with a buggy and a light wagon and a string of lead horses We had no instructions except to warn my brother in law, who lived about two miles distant and then place the horses somewhere out of reach of the invaders From this knowledge of proceedings of the Confederate raiders in Pennsylvania my father thought it probable that the first act of the Fenians would be to impress all the horses they could find, which was actually the case as they commandeered fifty or sixty in the immediate neighbor hood of their landing point

We drove westward on the Garrison Road to the road between the Fourth and Fifth Concessions N R then turned north and made the first stop at the house of my brother in law P E Miller, where we acquired another string of horses with another driver and eat ables We then went northward on the same road until we came to the crossing of the Bowen Road, where fifteen or twenty men and boys had assembled All were unarmed except one man, who had two shotguns We halted to give and receive news

In a few minutes a horseman came galloping toward us along the Bowen Road from the direction of the river He was bare headed and his hair was long and tangled He wore a long tight brown overcoat which was spotted here and there with dried mud Somebody recognized him and said he was Sam Johnston the smuggler When he reached the group he had a terrifying tale to tell Fifteen hundred Fenians had landed and they had 150 pieces of cannon, which seemed to me even then rather out of propor tion to the number of men They had killed Dr Kempson, the Reeve of Fort Erie, and all the lookout party of the Royal Canadian

Rifles My recollection is that he said he had seen their dead bodies As he was riding down the river road the Fenians had fired at him and he exhibited holes in his overcoat which he said had been made by their bullets He would hardly have escaped had not the *Michigan* a United States revenue cruiser, come down the river at that moment and swung her broadside round in a threatening manner which diverted the attention of his pursuers

Not all of these statements were, of course, verified in the future, but no one ventured to question their truth and the group hastily dispersed We turned westward and travelled with considerable speed without any very definite objective except to get out of the way of the blood-thirsty raiders The roads were dry and hard and the weather was calm and sunny On the road ahead of us and behind us and on parallel roads we could see carriages and lead horses travelling in the same direction We met none going the opposite way Opinion seemed to be unanimous as to the proper course to take We kept on until some time in the afternoon we reached Timothy Hann's carding mill near Streevesville I cannot remember why we went there, but it was a tolerably secluded place with plenty of sheds and stable room and hay for the horses Here there was a large mill-pond and three houses, one of which fully furnished was unoccupied and we were told that we might lodge there About twenty women and girls were collected in the largest house, but the men were all away trying to obtain news

My rest that night was broken several times by the sound of stray shots and galloping horses which seemed alarming and were never explained About eight o'clock next morning while standing beside the mill pond, I heard a few shots in the direction of Ridgeway, which soon became a steady roll of musketry We then knew that fighting was going on and six or eight of the men saddled horses and rode off towards the sound Before the fight had reached its crisis this group of horsemen arrived at a jog in the road in the low ground west of the Ridge Road some distance to the rear and right of the Fenian position, where unfortunately they were sufficiently conspicuous to be seen and give color to the alarm of cavalry From that point they had a good view of both firing lines and remained looking on until the retreat began In about two hours they returned to the mill with the news that our troops were beaten they had seen them running I do not think I ever felt more dispirited for in my childish ignorance I never supposed it possible that British troops could ever be defeated We had no alternative but to resume our inglorious retreat with the accession of as many young women and girls as we could convey I was driving the buggy and much to my confusion was asked to take a girl a little older than myself I was desperately shy and I

doubt whether I spoke a word to her in the whole journey Somebody suggested that we should take refuge at a certain house in the Short Hills where our herd of horses would be secure and this proposal was adopted I believe the owner of the farm was a relative of the Hauns We passed through Welland in the afternoon where we heard all kinds of alarming reports and I overheard some strongly disloyal remarks from an Irish seaman at the bridge which did not raise my spirits much We reached our destination before dusk to find the house crowded with other fugitives We deposited our load of ladies there fed our horses and ourselves the best way we could, and slept in the hay in the large barn very comfortably

Early next morning we heard that the Fenians had left the country and we began our return Some time about the middle of the afternoon we arrived at New Germany where a small military camp had been formed by a party of the 47th Regiment I had then become the driver of the democrat wagon and team of horses and was impressed by a civilian I demurred and was told very insolently that I must obey I still objected when an officer Lt Lloyd, came up and explained very politely the necessity of having the wagon and team This soothed me considerably and I said of course I would be glad to assist them Four soldiers of the 47th and three miserable prisoners were crowded into the wagon and I drove to the camp on the heights overlooking the village of Fort Erie at a walk arriving there after dark On the way the escort amused themselves by informing the prisoners over and over again that they would be shot in the morning Such are my reminiscences of the Fenian raid which I remember much better than many later events of more importance

HISTORY OF NATURAL GAS IN ONTARIO

By D. A. Coste

The history of natural gas in Ontario commences thirty years ago. While small quantities had been found prior to 1889 in wells drilled for oil and for water, or were known to be coming out in natural springs from the ground in several places in the Province, it was on the 23rd of January, 1889, that the first production in commercial quantities was struck in a well located on the north-west corner of Lot No. 7, in the 1st Concession of Township of Gosfield, in the County of Essex (you see our forefathers had almost struck the nail on the head in naming that Township). This well, which was drilled to a depth of 1031 feet, was found to have a capacity, 24 hours after it came in, of a little more than 10,000,000 cubic feet per day; and its rock pressure was 420 pounds to the square inch; and, may I not be allowed to take a little pride in what I may call, this discovery, not for myself—I was a mere newspaper man at the time—but for my brother, Mr. Eugene Coste, who located the well (in the very county in which he was born), and who formed the syndicate which drilled No. 1 well, and which afterwards became the Ontario Natural Gas Company.

The drilling of other wells by this Company quickly followed with varying success, all the good wells in the field being found within the small area contained in a triangle which had No. 1 well as its north-west corner, a point on Lake Erie 1 3/4 mile south of No. 1 and 2 1/2 miles east of Kingsville, as its south corner, and Sea Cliff Park, south of Leamington, six miles from No. 1, as its south-easterly corner, the base of the triangle being therefore all along the shore of Lake Erie. Some 30 or 100 wells, if my memory serves me rightly, were drilled by this Company in the Essex field.

The gas was for two or three years used only in the nearby

towns, viz., Kingsville, Ruthven and Leamington. In 1894 some 30 wells or so having been completed, an 8-inch pipe line was laid to Windsor, and gas was supplied to that city and to Walkerville and Sandwich. A year later a pipe line was laid across the Detroit river, and gas was sold to the residents of the city of Detroit. This marked the first extravagant use from wells in Ontario of this priceless fuel, which was followed two years later by a supply being sent to Toledo, through an old line which had previously been laid from the city of Detroit. It is almost needless to say that the field, while it had a number of large gassers, did not cover a sufficient area to warrant the enormous pull put upon it; and in 1904, after a winter of constantly lowered pressures on the wells, the gas rock was found to be badly invaded by the salt water immediately below it, and the first natural gas field discovered in Ontario was abandoned. In those days the operators did not have the means which are at hand today to take care of the water. The places supplied on our side of the river had to go back to manufactured gas.

This field, since it is no longer a producer, does not interest us as do the others discovered afterwards.

To complete the history of the production of natural gas in Essex, I must state that in addition to the field referred to above, a nice little pool of gas was also found in the Township of Mersea, about 1 1-2 mile north-east of Leamington, and some producing wells were also drilled at the north end of Point Pelee, but the life of these wells was of short duration. A number of dry holes have also been drilled in different parts of the county, viz., several north of Comber, from which some oil was obtained; one west of the Village of Tilbury; several in the northern part of Mersea Township; a deep well in the vicinity of Olinda, two or three in Maidstone and in Rochester, one at Essex, two in Colchester Township, two near Amherstburg, and a few more, the location of which I do not really know.

The history of the Welland field is now in order, it, as its predecessor, is also 30 years old, but with the difference that although pretty ancient, it is still alive.

The first operation in this field took place in May, 1889, when a syndicate organized by my brother and myself leased a large acreage of land for oil and gas, and located No. 1 some seven miles

east of Port Colborne, on Lot No 35 in the 3rd Concession from Lake Erie, in the Township of Bertie In the following August this well was completed with a flow of 1,700 000 cubic feet of gas per day, in the White Medina sandstone, at a depth of 836 feet, with a rock pressure of 525 pounds to the square inch The Provincial Natural Gas and Fuel Company of Ontario, Limited was then organized (and with a name of such length, how could the gas field do less than have a long life?) Development of this new gas field, as it quickly turned out to be such, was actively pushed, and in the fall of 1890 after 25 wells had been completed, an 8-inch pipe line was laid in an easterly direction from the then centre of production, to the Niagara river, a distance of about 18 miles, for the purpose of supplying gas to Buffalo, it having been impossible to raise money in Canada for the lines to reach distant Canadian towns, moneyed men feared the gas would play out Three lines, one 8-inch, the other two each 6-inch were laid across the river, and in the winter of 1890-1891 gas was first sold to the Buffalo Natural Gas Company (now the Iroquois Natural Gas Company) for distribution to a portion of its consumers Buffalo had been supplied with natural gas from the Bradford field some 80 or 90 miles distant for some 4 or 5 years prior to this time The Village of Bridgeburg was piped by the Provincial Company at this time In 1891 the Erie County Natural Gas Company, a Buffalo Company, having secured some territory and drilled several wells, also laid an 8-inch pipe line to the Niagara river and two 6-inch lines across the river, to Buffalo, where for a few years it supplied a small part of the city, where it had a plant formerly fed by a few small wells in the north end of Buffalo itself The Village of Fort Erie was at this time piped, and supplied with the natural gas by this company A few years later the Erie County Natural Gas Company's holdings in Welland County were purchased by the Provincial Company

In the meantime the Bertie Natural Gas Company had been organized, and had drilled several wells and piped the Village of Ridgeway which is to this day still using natural gas

The Mutual Natural Gas Company had also been organized at Port Colborne, and had met with immediate success in their wells west of that village, the gas being piped to Port Colborne Hum-

berstone Village, and to Welland Some fifteen years later the Mutual Company sold some of its wells and its Welland plant to the Provincial Company, the remaining wells and the plant at Fort Colborne being transferred to a new company, the Sterling Natural Gas Company, which is still doing business under the able management of Mr C E Steele

In the Fall of 1903 the export of natural gas to Buffalo having been stopped the Provincial company laid an 8-inch pipe line to Niagara Falls Ontario and piped the city The head office of the company is located there

Gas was found in our Well No 1 at a depth of 836 feet but the White Medina is not the only source of supply in the Welland field, as in many wells to the north of where the original first wells were drilled gas was found in the Clinton limestone, this formation being about 110 feet above the White Medina Some gas has also been found in a few wells on Point Abino at the southern extremity of the Provincial field, in the Guelph and Niagara limestone, from 200 to 300 feet above the Clinton This gas contains a small percentage of sulphur A little gas is occasionally found in the Red Medina sand and in three deep wells out of 14 drilled by the Provincial Company to the granite to depths of from 3030 feet to 3420 feet a little gas has been struck in the Trenton and in the Potsdam

The Provincial company has up-to-date drilled and purchased 466 wells which are located in the Townships of Bertie, Humberstone, Willoughby, Crowland and Wainfleet all in the County of Welland To this number of wells must be added from 150 to 200 more drilled by other companies and individuals in the Welland field

We now come to the very considerable production of natural gas which has been developed in what has been called the Haldimand Norfolk gas field, and which has of late years been extended into the east part of the County of Elgin, and also into the County of Brant The wells in this field have not been found to be as large as in some other fields in Ontario, but far many more of them have been drilled over a larger area than that covered by other fields

Following closely upon the discovery of natural gas in Welland County, the first wells in this field were put down in the winter of

1889-1890, in the vicinity of Caledonia and at Dunnville, and while not large, these wells gave sufficient encouragement for the drilling of others. It was but a short time after the drilling of the two wells just mentioned, when many small operating companies engaged in drilling, but it was in 1905 that the Dominion Natural Gas Company, then composed mostly of Pittsburg gas men, came into the field, and having leased a large acreage, drilled a considerable number of wells, and in the same year laid a line to Hamilton.

In 1906 the Manufacturers Natural Gas Company laid a line from Selkirk to Hamilton. This company had no gas of its own at the time, but purchased its supply from local operators, and sold it in Hamilton for industrial purposes.

The Dominion Natural Gas Company through itself and its affiliated companies, is by far the largest operator in what I will call the Haldimand field, for short. This company, which was later purchased by the H. L. Doherty interests of New York, has to date drilled and purchased 1181 wells, 395 of which either came in dry or have been abandoned, leaving 786 wells still on the lines.

Besides the gas obtained from its wells, the Dominion Company purchases a good deal of gas from a number of small operators. Gas is sold at Hamilton, Brantford, Dundas, St. Catharines, Dunnville, Cayuga, Galt, Simcoe, Tillsonburg, Paris, Port Dover, Port Rowan, and in a number of other towns and villages and through out the Townships through which the pipe lines are laid. Some 21,500 consumers are supplied direct by the company and its subsidiary companies, and in addition gas is sold wholesale to the United Gas and Fuel Company of Hamilton, who in turn retails it to about 20,000 consumers.

The wells throughout this field vary in depth from about 600 feet at the northern end of the field, to about 1400 feet in the southern part, and gas is obtained sometimes in the Clinton, sometimes in the Red Medina, and also in the White Medina.

As I have stated above, a number of companies and individuals are operating in the Haldimand field, and while I cannot mention them all, I will give the names of some of the principal ones. The Waines-Root Gas Company have drilled a number of wells in the Townships of Cayuga, Rainham, Dunn, Canboro and Walpole. Lalor, Atkins and Smith have put down wells in Dunn, Sherbrooke

and other townships F L Smively one of the old drilling contractors, has also put down a good many wells for himself and others the National Gas Company has also operated quite largely in several townships, as also the Producers Natural Gas Company the Holmes Gas Company the Fort Colborne-Welland Natural Gas Company, the Standard Natural Gas Company The Medina Natural Gas Company, and others, and practically all towns villages and hamlets in the several counties I have mentioned are supplied with natural gas

The next and last natural gas field of importance in Ontario which may well be called the best, is located in the County of Kent in the Townships of Tilbury East, Romney and Raleigh and usually known under the name of the Tilbury field

The first well in this field was located on the Kerr farm, Lot No 10, Middle Road North Tilbury East Township It was drilled by the Acme Oil Company of Detroit, and completed in December, 1905 with a flow of about 40 barrels of oil per day and a volume of gas estimated at a quarter of a million cubic feet per day Those of us who were in the business at the time will remember the excitement which prevailed Syndicates and companies were formed over night, and in a short time many wells had been put down a number of which produced a considerable quantity of oil These wells were almost all located in a northerly direction from the Kerr well for a distance of about 3 miles In but very few exceptions flows of gas were struck in these wells varying from 50 to 300 000 cubic feet per day, but no attempt was made to save the gas and it has been estimated that over two billion cubic feet of gas were wasted from the mouths of the wells in order that the oil might be freely gotten out

It was in the late summer of 1906 that well No 1 on the Halliday farm a short distance north of Fletcher, drilled by a syndicate which I had formed was completed, this well came in good for 6 000 000 cubic feet of gas per day and while not in what is today the gas field, was really the start of the natural gas business in Kent County The Volcanic Oil and Gas Company was then organized and a 3 inch line was laid to Chatham, and in March, 1907, the first gas was put into the mains of the Chatham Gas Company Within two or three months however it was found that this well

was quickly turning to oil, and two other wells of the company which had just been completed, south-east of the Kerr well, were hurriedly connected to save the situation.

In the meanwhile the Leamington Oil Company of Detroit, since the Canadian Gas Company, had brought in a well good for some 7,000,000 cubic feet of gas, at the northern end of Lot 181, Talbot Road Survey, some 7 miles almost due south of the Kerr well, and again considerable excitement prevailed. Several companies rushed into the field, among them the Volcanic Oil and Gas Company, the United Fuel Supply Company, the Ridgetown Fuel Supply Company, the Rondeau Oil and Gas Company, the Maple City Oil and Gas Company, The Beaver Oil Company, The Halliday Syndicate, and others. A number of good wells were quickly put down, and competition for the securing of the available market ensued. In the late summer of 1909, the Volcanic Company, having made a contract to sell gas to the Windsor Gas Company for distribution in that city, laid a main line, half 8 inch and half 10-inch, to Windsor, a distance of a little over 40 miles. This company's line to Chatham had prior to this time been changed to a 6-inch. Now it is an 8-inch for almost the entire distance of about 22 miles. At about the same time as the Volcanic Company entered Windsor, the United Fuel Supply Company and its associates, the Ridgetown Fuel Supply Company and the Rondeau Company, having made a contract to supply Sarnia with gas, laid an 8-inch line to that city, a distance of about 60 miles. The Beaver Company shortly afterwards laid a line to Leamington and Kingsville, and again these two places, the first to be supplied with gas in Ontario, from the Essex field, were enjoying the benefits of a natural gas supply. A line was also laid by the Northern Pipe Line Company to Wallaceburg. This company obtained its supply of gas from the Leamington Oil Company. Another line was laid by the Ridgetown Fuel Supply Company to the Village of Ridgetown, and as far east as Highgate. The Volcanic Company at about the same time laid a line to Blenheim to supply that village.

With all these companies in the field, each one of which was bidding for business, franchises were obtained and contracts were entered into for the sale of gas at prices far below the proper ones at which natural gas should ever have been sold, and enormous

waste resulted for the Gas Companies, while the cities, towns and manufacturing concerns supplied benefitted greatly

It was on January 1, 1912, that for the purpose of better conservation of the field the Union Natural Gas Company of Canada, Limited, was formed This company amalgamated all the interests of the Volcanic Company, the United Fuel Supply Company, the Ridgetown Fuel Supply Company, and the Rondeau Oil and Gas Company, and controlled by contract the supply of gas of the Canadian Gas Company to the United Company and to the Northern Pipe Line Company

In 1913, the Glenwood Natural Gas Company, a new-comer, financed by American capital having acquired the field holdings of the Maple City Oil and Gas Company, and purchased the Beaver Oil and Gas Company, started the drilling of a number of wells in the field, several of which were put down in Lake Erie, a few hundred feet from the shore In the same year, the Southern Ontario Gas Company which was a pipe line company, laid a 12-inch pipe line all the way to Hamilton, a distance of approximately 150 miles, and the gas conveyed by this company which is purchased from the Glenwood Company and the Beaver Company is sold to the Ingersoll Gas Light Company, and the Woodstock Gas Light Company, who retail it respectively to the residents of Ingersoll and Woodstock The Southern Ontario Company also sells gas to the Manufacturers Natural Gas Company at Hamilton, for distribution there besides selling gas direct at Dutton, Rodney, West Lorne, Highgate, and a number of other places, including a few consumers at London

The gas in the Tilbury field is found in the Onondaga and the initial rock pressure was about 600 pounds to the square inch

To the operations of the Union Company in the Tilbury field, I now must add what this company and others have done in the way of deep drilling in what is known as the Dover field, located some 12 miles or so south west of Chatham On May 19, 1907, a well was brought in, in the Trenton limestone on Lot 3, Concession 3, Township of Dover West at a total depth of 3185 feet, good for 6,500,000 cubic feet of gas The Trenton had been struck at 2883 feet, and five distinct pays of gas were encountered from 2965 feet to 3168 feet, at which point the most of the gas was found.

This well which had a rock pressure of 1225 pounds to the square inch, showed a little spray of oil and again excitement prevailed The Union Company has since the drilling of the first well, completed 12 wells in the Dover field, two of which are producing gas only, while four others are producing both gas and oil the remaining six wells having come in dry, two of these dry holes were drilled down to the granite to depths of 3765 feet and 3735 feet Besides the wells of the Union Company, several other deep wells have been drilled in Dover some three or four of them notably by the Central Development Company, but in all cases failures have resulted, and the large new find which was hoped for, has not materialized

I have given you a long history upon the finding of gas in the four principal fields in the province, but even at the risk of trying your patience, and to make the history fairly complete, I must speak at some length of the gas which was found a few years ago near Oil Springs In 1914, Dr Fairbanks of Petrolia drilled in a well south of Oil Springs, in the County of Lambton, to a depth of about 1900 feet which actually measured at the mouth of the well some 30 000,000 cubic feet of gas, with a rock pressure of over 800 pounds to the square inch This was the biggest well ever drilled in Ontario, and naturally attracted a great deal of attention The Union Company and several other companies and individuals then started operations in the neighborhood and some thirty wells were drilled within a radius of five or six miles, but with poor results indeed, one well only that put down by the Oil Springs Oil and Gas Company within 300 feet of the Fairbanks well, being a really good well

The Union Company having made an agreement to purchase the gas from the Fairbanks well, laid a 6-inch line to Petrolia, a distance of 12 miles, which also was connected with the Sarnia line of the company but in three months the gas in this well as in that of the Oil Springs Company's well, had practically petered out, the pressure having gone down to 40 pounds The Union Company in the end, had expended over $200,000,000, and had come out at the thin end of the horn and there were others

Many wells have been drilled in other parts of Ontario, but unfortunately the results were of little or no value, and many dry holes have resulted

I will now give you some figures to show the very large amount of money which has been invested in the natural gas business in the province These figures should convince everybody that natural gas has played a very important part indeed to the life and prosperity of many people They surely show that every effort should be made so that the business may be kept going as long as possible

The following is a close estimate of the wells which have been drilled

	Wells Drilled	Wells now Operated
Essex field	175	none
Welland field	700	300
Dominion Nat Gas Co	1181	786
United Gas Co	115	43
Beaver Company	64	23
Glenwood Compaoy	92	77
Union Company	203	143
Canadian Gas Co	43	42
Miscellaneous	350	
Totals	2923	1420

You will see by this table that 1420 wells out of the total number drilled are still being operated, which means that 1503 wells either came in dry or have been abandoned

The 2923 wells drilled I have averaged at a cost of $2 500 00 per well, giving us the sum of $7,415,000 00

The following is a close estimate of the main lines and field lines which have been laid to convey to the markets the natural-gas from the several fields

	Cost Main Lines	Cost Field Lines
Essex field, 60 miles	$ 450,000	$ 250,000
Welland field, 92 miles	700,000	500,000
Haldimand field, 152 miles	1,200,000	1,200,000
United Gas Co , 27 miles	225,000	75,000
Beaver Co , 34 miles	260 000	25,000

Southern Ontario Co , 150 miles	2,250,000	
Glenwood Co		175,000
Union Co , 205 miles	2,400,000	300,000
Miscellaneous, 60 miles	350,000	300,000
Totals	$7,835,000	$2,725,000

You will see by this table that the very large amount of $10,560,000 has been expended in the laying of pipe lines

The following amounts are also closely estimated to have been expended before the natural gas has reached the consumer

City plants, served with natural gas and service lines	$6,500,000
80,000 meters, at $12 00 each (average)	960,000
Paid in rentals for wells	2,500,000
Compressor stations	600,000
Miscellaneous other outlay	2,000,000

All of the above, which is more likely to be under the mark, comes to a total of $30,535,000.

I have also closely approximated the number of meters in use at 80,000, which means, figuring on 5 persons to a family, that 400,000 men, women and children in the Province of Ontario, are enjoying the benefits of natural gas in their homes at the present time

NATURAL GAS DISCOVERED WHEN PETROLEUM WAS SOUGHT

By George H. Smith

The data I here present on the history of natural gas in the County of Welland is from records and information gathered from the citizens of the county

Outside influences often change lives, as well as industries from the path that they originally began The natural gas industry is no exception to the rule and without the petroleum industry the natural gas industry would perhaps never have been born

Petroleum was discovered and used ages ago It is recorded that the people of Babylon and Nineveh used it 2,000 years before Christ Pliny described the oil Agrigentum brought from the Island of Sicily and burned in lamps by the Romans about the time of Nero Marco Polo, during his travels in the thirteenth century, discovered the fire temple at Baku, in the Caucasus, the home of the ancient fire worshippers, whose shrine was a burning spring the fire from which was not extinguished until the drilling of wells in later years, drained its supply of petroleum The people of Persia, Arabia, China and India utilized petroleum in its crude state, taken from springs

The discovery of oil in North America can be credited to the Seneca Indians, who found it in the form of an oily scum floating on the surface of ponds and streams It was utilized by them for medicinal purposes, and their method of obtaining it was by means of a blanket soaked in the fluid and then wrung out About the first record of petroleum in America was in a letter written by Joseph de la Roche Daillon, a French Missionary in the year 1629 Later in 1750, the commander of Fort Duquesne mentioned the springs in Oil Creek in a letter written to General Montcalm

In 1775 George Washington dedicated to his country as a national park a tract of land which he had pre-empted, located in West Virginia containing a burning spring This, too, was leakage from crevices in the ground

Petroleum and natural gas were both found in the salt wells drilled along the Kanawha River in West Virginia, about the year 1815 It is recorded that the first producer of petroleum in America was Hiram Hill of Titusville, Pa who gathered and barrelled seepage oil along Oil Creek and shipped it to Pittsburg, Pa., on rafts Dr Kier of Pittsburg was perhaps the first oil refiner in America, for he successfully distilled some oil taken from salt wells at Tarentum, Pa., in 1850, nine years before Col Drake drilled his famous first oil well at Titusville Pa

In the year 1812 the Gas Light and Coke Co of London, Eng obtained a charter to supply artificial gas to that city William Murdock was the inventor of coal gas and lighted his home with it in the year 1792. He was connected with the above mentioned company when they first applied for their charter, three years before it was finally granted At the time of the first application before the House of Parliament, a great deal of ridicule was directed toward Mr Murdock and his company

Natural gas was first observed in the United States in the burning springs so called that were found at many places in the Appalachian Mountains The first attempt to utilize this fuel commercially was at Fredonia, N Y in the year 1825 While removing an old mill which stood partly over the Canadoway stream some bubbles were observed to break frequently from the water and on trial were found to be inflammable A company was formed, and a hole an inch and a half in diameter, being bored through the rock, a soft limestone, the gas left its natural channel and ascended through this A gasometer was then constructed, with a small house for its protection, and pipes being laid, the gas conveyed through the whole village About one hundred lights were fed from it and sold to the consumers at one dollar and a half yearly each The gasometer used, collected about eighty-eight feet in twelve hours during the day

After the completion of the Drake Well in 1859, oil companies and oil wells sprung up very fast in Pennsylvania Matthew Ri-

chardson of Port Colborne made a trip to Titusville and on his return was evidently instrumental in forming a company and commenced drilling operations for oil on Lot 31 Con 1, Township of Humberstone on the farm of David Steele, father of C E Steele; this was in 1864 or 65 Some of the men connected with the company were Mr Hellems of St Catharines who was President of the Company John Mathews John McCullough, Mathew Richardson Chas Carter Lewis Carter, David Steele, John Scholfield Samuel Norcross and I suppose several others The stock sold at $25 00 per share and David Steele leased his farm for 25 years

The rig used was something similar to the ones used today but smaller and lighter This rig was sold to the company by Mr Hellems and the drilling was done by day work The rope cable used was purchased by John Mathews in Oswego and cost about $100 00 for approximately 1 000 feet The actual drillers were Nelson O Brien and his brother in-law John Elliott of Fort Robinson The size of the hole was 5 inches in diameter They would drill about 6 feet pull out the tools, take off the bit, and put on a tummer and rim down the 6 feet again the object was although they kept the tools turning continually to make a more perfect hole

Sulphur gas was struck at 420 feet Evidently they struck gas in the Clinton formation and from information gathered I think they had at least an open flow of 500 M cubic feet per day Of course, they were drilling for oil and the gas was more or less of a nuisance They piped the gas back under the boiler and used it for fuel for a time but owing to the water collecting on top of the gas it came in puffs and one day the well caught fire and exploded After that they went back to their old fuel The drilling after the gas was struck, continued under difficulties There was no casing or pipe of any kind in the well The water, service and salt, would collect on top of the gas which would make pressure, the water would be blown about 50 feet in the air and any person nearby would get a shower bath

This continued until they were down 842 feet at which depth the well was abandoned The tools were left in the well, this was in 1866 Of course, the oil industry was in its infancy at this time,

The salt water was taken and boiled down to see if they could make a salt well out of it The red medina was tried out as a weather proof paint and in fact the story was once circulated that they had discovered gold

The Steele well kept blowing water and gas into the air for years About 1870 Jefferson Steele who lived and still lives on the farm, by means of a small pipe would blow up a pig's bladder and carry it to his house and burn the gas for curiosity

In 1872 Titusville Pa , was piped for natural gas for domestic purposes This was the first real effort to sell gas for all purposes, the gas being delivered through a 2-inch line from the Newton well about 5 miles north of Titusville

In 1880 Jefferson Steele gained some information from a man by the name of Robinson who had been in the gas fields of Pennsylvania They put a leather packer similar to what is known as a screw packer today down about 400 feet connecting it with a ¾ inch pipe, brought some of the gas through it and piped it to his house Of course, water and gas came out at the same time

He had two wooden tanks made one to fit inside the other, telescope fashion These tanks were about 5 ft by 7 ft , or about the size of an ordinary cistern, the gas and water would come into the bottom tank and the gas taken out of the top one This was practically a gasometer and regulator combined The gas from the well he did not use escaped between the two tanks into the air After he reached the house with the gas through a 3-4 inch pipe they first burned it without air, and of course they collected a great deal of carbon on the cooking utensils Robinson and Mr Steele had an air mixer made out of tin something similar to two dippers telescoped and which they could regulate the air I would say that this was the first natural gas burned for domestic purposes in Canada

During the time this well was being drilled or shortly after it was abandoned, an oily scum or what looked like oil was noticed on a pond on Lot 5 Con 11, in the Township of Crowland, on the farm of Lemon Dell The oil boom was drifting from U S and Edward Redpath, then a prominent merchant of Lundy's Lane, succeeded in forming a company, which consisted of about twenty-five members of the immediate vicinity of the Dell farm and the

stock sold at $25 per share A location was made close to this pond and drilling operations commenced in the summer of 1866 The rig used was similar to the one used in drilling the Steele well A rope cable about 3 inches in diameter was used for drilling and they drilled a six inch hole A Frenchamn whose name could not be remembered from Pennsylvania, owned the rig and did the drilling The contract price was to be $600 00 for the well At about 550 feet, on March 13, 1867 they struck gas and immediately the well took fire and all equipment was burned leaving the tools and rope cable in the well You must remember that there was no casing or pipe of any kind in the well and the bystanders could not understand the water and gas coming out together and the gas continually burning, wondering why the water did not extinguish it From information gathered, this well must have had an open flow capacity of at least 500 M cubic feet per day Even today wells of that size when once caught fire generally burn all equipment and are not easily extinguished

The well was immediately abandoned and like some of the enterprises of today a number of the shareholders had subscribed for stock, but had not paid for it, and never did The bulk of the paying fell upon Mr Redpath

This well forced water and gas from it for years when a stranger whose name I could not get put up a small pole derrick, and salvaged the tools and rope selling some of the rope cable to the citizens in the vicinity I had the opportunity of seeing a piece of it and it consisted of 3 one inch lines woven together, making a 3-inch cable From information received I do not think there was any gas sold for domestic consumption from this well The people on the farm and vicinity were frightened of it and decided to leave it alone I am greatly indebted for most of the information obtained about this well to Alfred Pearson

After the towns of Pennsylvania and Western New York had been piped for natural gas and had proven a success the Port Colborne Natural Gas, Light and Fuel Co was formed with C McNeal Sr, President and D Hughes Secretary-Treasurer, and began operations in 1885 The corporation of Port Colborne contributed a bonus of $500 to the enterprise with the understanding that if the company was successful the amount was to be repaid to the

village in gas for lighting the streets The well was located on village Lot No 7, South Charlotte in the village, where the Guild Hall now stands

The well was drilled by a Mr Johnson of Petrolia The rig used was known as a pole tool rig, white ash poles bolted together in about 50 foot lengths and the stem or drilling bar screwed on the end These were screwed together and lowered into the well, length by length and taken out the same way to change bits or run the bailer as they went down the length of one pole another pole was added These poles answered the same as our wire line or rope cable

Salt water was struck at 455 feet and gas at 765 feet, but not in sufficient quantities to satisfy the company The rig was then changed to a cable rig and the well drilled down to 1230 feet at which depth the tools got fast and are still there The open flow capacity was about 10 M cu ft per day or at that time estimated at 200 ordinary jets A one inch pipe was laid around the village and gas sold to consumers for lights only This pipe was laid around the business portion of the town on West Street around to the Catholic Church and as far down King Street to DeW Carter s across the canal down East Street and around to McNeal s hotel then up Welland Street to Mathew Richardson s The rate charged was $1 50 per light per month or approximately 5 cents per light per day If they were not burned the full month each night a rebate of 5 cents per light per night was made to the consumer and sometimes the bill would be $1 30 or $1 35 for the month

The time intervening between the striking of the gas and the laying of the pipes, Mathew Richardson one of the shareholders had a large rubber bag which he would fill with gas from the well carry it over to his residence which he had piped for lights and burn it in jets around the house Of course he made several trips per week

A great deal of trouble with these early wells was caused by water, even if the casing was right evidently they never figured that the salt water came in with or near the gas and needed immediate attention as soon as drilling operations stopped At this time no precaution was taken to take care of the water and as a rule the small capacity wells were soon drowned out

After the finishing of the well as you may call it where the Guild Hall now stands, Mathew Richardson made a contract with Mr Johnson to move his rig over the canal and drill on Lot No 20 West Fares in the village of Fort Colborne near Mr Richardson's residence Richardson paid Johnson $800 00 and furnished power, casing, etc and one man to help This well was also drilled with the pole tool rig Salt water was struck at 400 feet cased at 450 feet with 5 inch casing, below the casing a 4 inch hole was drilled to the bottom which finished at 750 feet In those days most wells were shot as it is termed, to splinter the rock where the gas is struck, to increase the flow, but unless this operation is carried out correctly, and the well thoroughly cleaned out afterwards, it was as a rule a detriment, rather than a benefit to the well Eighty pounds of nitro glycerine were used in shooting this well, but the driller refused to run the tools in again to clean out the hole, claiming a cave-in might occur above the tools and he would lose them In this shape the well was left Although Mr Richardson had a good sized iron gasometer made and spent a great deal of time in trying to collect the gas the open flow capacity was very small and even today a little gas escapes from this well The only gas sold was to a few of his immediate neighbors and that only for a short time This was in 1889

The following year Samuel Hopkins Sr , drilled a well in the rear of the Hopkins Block Fort Colborne but this too, was of small capacity, and as there was no way of taking care of the water it soon drowned out and no gas of any account was sold out of it

This short paper concludes the early history of the attempt of the pioneers of Welland County to establish the oil industry which after years of drilling in later years proved to be an impossibility and although financially these early wells were not a success yet the money was not spent in vain for it gave the stimulus to the next generation to go on and develop the natural gas fields of Welland County

THE FIRST SIGN OF GAS IN WELLAND COUNTY WAS AT BURNING SPRINGS—GOURLAY MENTIONS IT IN 1817

By George Wells

Many of the older residents of this district well remember the Burning Springs, at Niagara Falls. They were located on the banks of the great cataract of the Niagara River between Chippawa and Niagara Falls. As a very young lad, on my way to Drummondville with my parents to do marketing I well remember the big sign on the side of the roadway, "To the Burning Springs." As I remember the legend as to its discovery it was while workmen excavating at that point for a spring well when one of the workmen in lighting his pipe set fire to escaping natural gas that was emitting from a crevice in the rocks. This discovery of a burning spring was another wonder of the world for the sightseers in those days who came to Niagara Falls. It then dawned on the mind of some of the promoters of the many points of interest that this would be a money-maker, and accordingly it was extensively advertised as the "Wonderful Burning Springs at Niagara Falls, Canada." It was visited annually by thousands of tourists every summer from all parts of the world. That is the first that I remember of the commercializing of natural gas in Niagara District. Whether the Burning Springs are in existence today or not, I cannot say, but the sign was there a few years ago. I remember a story that was told of a son of the Emerald Isle, who was sight-seeing at the Falls, was asked by his guide what he thought of the burning springs when he replied "That they were robbing God of what He intended to burn the world up with."

To complete the chain of this gas story it will be necessary to leave the Burning Springs and take you to the great Petroleum Oil Fields of Pennsylvania—which would be about the year 1864

or 1865—where flowing wells of petroleum oil were being produced by the hundreds—and where thousands of people were flocking to make their fortunes in oil and where cities were building up in a night A number of people from this district joined the great army of oil seekers but not many succeeded in making fortunes, but a few came back who thought themselves rich in geological knowledge of the earth's substances, and instilled it into the minds of a few of the people in the district that the prospects for petroleum oil was as good as in Pennsylvania and then commenced the formation of companies for the drilling of oil wells

We quote the following paragraph from Mr Robert Gourley's History of the Township of Stamford, in the County of Welland in the year 1817

"Of the minerals there are none, except bog iron and ore, limestone there is abundance, it being the general strata of the Township, all the bank of the Niagara River being of this, as also the rock over which the Niagara Falls pour No plaster of paris has yet been found of a good quality, some marl, no salt rock, some salt licks on the banks of the Chippawa, no salt springs, several inflammable gas springs, which ooze out of the bank of the Niagara River from the mouth of the Chippawa River and extend about one and one half miles down The air from some of these when confined in a tube will burn constantly"

The first company for the drilling of wells for petroleum oil was organized in the Township of Pelham on Tuesday, Sept 12, 1865 and was called the "Pelham Oil Well Company" The first meeting of the shareholders was held in the Hansler School house with Dr Fraser, chairman and John B Crow, secretary

The capital stock of the company was $2,000 fully subscribed The following gentlemen were elected as directors Saml Beckett, Robt D Castleman, Jos Garner Danl C Roland and Nehemiah H Ward I have no information as to what property the well was located, but the company started drilling operations that fall for in the early spring of 1866 they met with a misfortune by losing their drilling tools in quick sand and that apparently wound up the company's operations although they received their charter in May, 1866 but we have never discovered where they have done

any further work or that they ever found any indications of oil or gas They sold the drilling machinery to another oil company

PORT COLBORNE OIL COMPANY

On Thursday February 14, 1866, a meeting of the citizens of Port Colborne was held at Hardison's hotel for the purpose of organizing an oil company The capital stock was fixed at $6 000 Lewis G Carter was appointed to the chair The following were appointed trustees John Gordon Port Colborne, Chas Hellems, St Catharines, John Matthews and the Messrs Carter, Port Colborne Drilling operations were commenced on a well on Tuesday, May 6th, 1866, on the property of David Steele, a short way west of Port Colborne The well was drilled to a depth of about 500 feet when quite a large vein of natural gas was struck, when the tools became fast and operations for drilling for petroleum ceased Natural gas flowed from this well for a number of years before it dawned upon the mind of man that it could be used for commercial purposes Nothing further was ever done in this section as to drilling for petroleum oil

CROWLAND OIL WELL

On August 16 1866 a company was formed by Drummondville capitalists for the drilling of a well in Crowland Township for petroleum oil The well was located on the farm of Lemon Dell, near the historic village of Cooks Mills as the geologists who had just returned from the oil fields of Pennsylvania claimed the soil in that locality resembled very closely the soils of Pennsylvania, where all the rich oil fields were being produced High anticipations by the farmers of the community that in a few years Cooks Mills would be a bustling city like the oil cities of Pennsylvania, with its many oil refineries

The machinery for the drilling of this well was procured from the promoters of the Pelham Oil Well In March, 1867 when at a depth of about 500 feet operations at the well were temporarily suspended on account of the large quantity of natural gas emitting from the well The force with which the gas rushed from the well was such that at times it threw up jets of water from 20 to 25 feet, completely drenching everything in the derrick room

The discharge of gas gradually became less, the flow of water decreased and the employees resumed work but for only a few days, when one evening between the hours of 10 and 11 o'clock when the discharge of gas increased to such a degree as to ignite with the lights of the workmen almost instantly enveloping the derricks in flames and totally destroying it The shareholders met on the 14th of March that year to make arrangements for the rebuilding of the derrick but it was finally abandoned

A number of years after the well was abandoned the gas was piped into a near by house and used in the cook stove for cooking purposes (If memory serves me right the name of the family was Quinlan or Quilnan) The house was located a short distance from the well

We think it strange these days in the progress of science that the mind of man should have lain dormant for these many years without seeing the great commercial value of natural gas—for it was many years after this before natural gas became a great commercial commodity in this district

Since this article was written there has come to hand Vol III of the Simcoe Papers edited by General Cruikshank One letter quoted is from a gentleman to his friend descriptive of the different settlements in the Province of Upper Canada (New York November 20, 1794) and there is a paragraph on the discovery of natural gas in Welland County Since this is the earliest reference to natural gas we have seen the paragraph is here reproduced for its historic interest

Amongst many other natural curiosities a spring about two miles above these falls, attracts the attention of the curious—emitting a gas or inflammable air which when confined in a pipe, and a flame applied to it will boil the water of a tea kettle in 15 minutes Whether this may hereafter be applied by machinery to useful purposes time will determine It was lately discovered in clearing away and burning the brush under the bank of the river to erect a mill and was observed after the brush was consumed to burn for days together to the great astonishment of the inhabitants

ORIGINAL AND HISTORY OF THE DEVELOPMENT OF NATURAL GAS

By Chas. E Steele

To tell the whole story of the origin and development of natural gas would require volumes, and many phases of business activities would be vividly depicted, for there are few enterprises more taxing or more difficult than the natural gas business The industry comprises three separate and distinct branches, each containing many sub-branches interesting and important, and each sub-branch containing sufficient material for a reasonably long article Those branches are Production, Transmission and Distribution There are certain economic, scientific and business laws which, to a marked degree run through and bind together all these branches, but for the purpose of this paper I will confine myself more particularly to distribution The story of the distribution lines in both urban and rural communities, and a study of the system necessary for the control and regulation of the pressures would be interesting, but we will consider distribution only under three heads, namely: Waste, Conservation and Price

WASTE

Welland County is the oldest producing gas field in Ontario, the first commercial well being drilled in the Township of Bertie in 1889, by the Provincial Gas Co The early history of the natural gas industry of this field is similar to that of practically all fields The mistaken idea prevailed that because the early wells were large producers the supply was practically limitless This old but vital error was followed by a large measure of waste Wells were sometimes allowed to remain open for a considerable time after being drilled in, and leaks in gas lines were not promptly re-

paired The more serious loss, however, in the field, has resulted from the ridiculously low price at which gas was sold in the early days In 1892, the Mutual Natural Gas Co, supplied the Erie Glass Co, at Port Colborne with gas at one thousand dollars per year, and the only stipulation contained in the agreement was that the use should not exceed two hundred thousand cubic feet per day, which figuring three hundred days use would be at the rate of one and two-thirds cents per thousand cubic feet It requires no argument to impress a Welland audience with the inevitable result of selling natural gas at such a price This price of course, was unusually low but immense quantities have been sold for industrial and domestic use at prices ranging from five to twenty five cents For a number of years in Welland County practically all gas sold for domestic use was sold at a flat rate, that is, so much per stove per month, and available records show that gas was supplied for a cooking stove and a heater for use during the entire year for $27 00 and that without any limit upon the amount consumed It naturally follows that a commodity sold at a fraction of its real value will be wasted, and there is no more outstanding example so definitely shown as in the operation of the distribution and sale of this valuable commodity Natural gas in Welland County and practically throughout the gas producing area of Ontario contains about 1000 B t u per cubic foot, while artificial gas usually contains about 400 B t u per cubic foot, but rarely exceeding 500, which makes natural gas about twice as rich in heating properties as the artificial gas In the early days exceedingly crude and inefficient appliances were used in the stoves in the furnaces for lights and indeed everywhere This was to be expected, because the gas cost practically nothing Producer and consumer were alike ignorant of the value of this wonderful fuel, and ignorant also of the fact that the supply would inevitably diminish, and ultimately become exhausted In a business place in Welland County (in the early days) the proprietor was burning gas lights throughout the place during the day and when asked by a customer why he did not turn them out, replied that the gas light was cheaper than the sunshine Many interesting and almost unbelievable stories could be told of the use of gas in the early days When meters were not used and gas sold at a flat rate,

people often kept their stoves burning continuously, and explained it by saying that they wanted to get even with the gas company The waste in the early history of the natural gas business was inevitable from the circumstances which attended the development of the field There are close analogies in the history of other industries The pioneer settlers of this country cleared the forests from the land and burned the brush and logs to get them out of the way If lumber had been worth its present price this would have been an appalling waste, but the imperative need was for land, and there was a seemingly inexhaustible supply of timber, so their action was inevitable and logical

The natural gas industry has progressed from a condition of abundance to one of scarcity in a fraction of time required by the lumber industry, but the steps have been exactly the same Unfortunately, there is one striking difference between the lumber and natural gas industries Scientific forestry effects a perpetual production of timber The best that can be done with natural gas is to so conserve the remaining supply that as little as possible of it will be lost, and to direct its use so that it may be made of the greatest possible service to the communities which enjoy its benefits Every one of the processes through which natural gas passes before it reaches the consumer is accompanied by waste, as the operation of a machine is accompanied by friction By proper design and construction friction in machinery can be reduced to any desired minimum In the same way, waste of natural gas can be cut down If a machine must be marketed at a low price, it is impracticable to make it as easy running as a similar mechanism selling at a higher price For the same reason, the waste in handling natural gas has always been greater than that of manufactured gas, which commonly sells for several times as much

The gas consumers in this section are gradually but surely appreciating the necessity of co-operating with the gas companies in improving facilities for burning gas, so as to bring about the conservation The abandoning of flat rates charged in the early days, and substituting therefore instruments for measuring the gas, was absolutely necessary but the consumer, unconscious of the benefits which would accrue to consumer and producer alike, opposed the placing of gas

meters Those little instruments were the monitors which emphasized the truth of waste, and induced the consumer gradually to abandon the appliances originally used in the consumption of gas The old pipe and log burners, full of big holes and bigger cracks first gave place to the three and four way burner in ordinary cooking stoves and later these burners and stoves were put aside for gas ranges The incandescent lights with proper combustion appliances took the place of the old jumbo burners and flaring tips Natural gas was burned in many furnaces by simply inserting ordinary gas pipe, but today where gas is utilized in furnaces at all it is through the use of scientifically arranged burners which produce the most satisfactory results

From an experience of twenty years in the natural gas business, I am confident that I do not over-estimate when I say that through out Welland County one thousand cubic feet of gas is today giving as great if not a greater service to the consumer than ten thousand cubic feet did in the early days If economic appliances had not been brought into use there would be no natural gas in Welland County and indeed it would have been exhausted years ago

I said I would confine this paper more particularly to distribution, but as I have referred to the more economic appliances used by the consumers I wish also, in fairness to the producers, to say that the gas companies have, for the most part also applied themselves to the work of conservation Having had special opportunities of observing the handling of natural gas in the county I want to state that we owe considerable to the wise and economic methods persistently applied by the Provincial Gas Co for had the pioneer company in this old territory been one less careful and thorough this field would have been extinct years ago

Another marked step in the economy of distributing natural gas is in the reduced pressures made possible, first by the improved regulators and more of them, and secondly by ways of scientifically constructed facilities for burning In the early days consumers thought their supply very limited unless they had at their disposal a pressure of something like one pound to the square inch and unfortunately in a great measure this deplorable condition still exists in the rural districts, more especially in the western part of the province While motoring through the gas areas of Kent and Nor

folk a few weeks ago, I saw dozens of individual gas regulators along the country highway loaded with bricks and other objects, placed there by the consumers to give them a very high pressure service These methods are slowly but gradually being eliminated and instead of it being necessary for the companies alone to correct this unwise and wasteful practice, the consumers should really be the first to stop the practice and they no doubt would if they realized the immediate danger to their homes and their property There is an old adage which says "We never miss the water till the well runs dry" and me thinks that what the sage really put was, "You never miss the gas till the well runs dry"

The Provincial Government has framed considerable legislation, very largely with the object in view of conserving the remaining supply of natural gas We have said that Welland County is the oldest producing county in the province, dating back to 1889 There was, however, some gas produced in the County of Essex prior to that time but the field soon became flooded with water, and was abandoned We may, therefore consider that the natural gas industry began in this county, and in the year 1889 From that time until 1919 there was practically no government control The natural gas industry was conducted as any other business, or at least as far as the nature of the industry would permit Companies arranged with land owners for permission to drill wells on terms agreeable to both parties The companies were free to sell gas where they desired, and at such prices as they could secure The companies were in fact absolutely free to manage their own business Gas was being found in large quantities,—in fact wells that would be considered very fine wells today were not then kept and in order to secure a market contracts were made with industries for large quantities of gas In the year 1919 a distinct shortage of gas for domestic use was experienced in the Counties of Essex and Kent The Government was appealed to, and asked to take some steps to compel the gas companies to discontinue the sale of gas for commercial purposes, so as to insure a sufficient supply for domestic use In compliance with this request, the Government issued peremptory orders compelling the gas companies to discontinue in a very large degree the sale of gas to industrial plants This order had the effect, of course, of breaking contracts

between the gas companies and industrial concerns which they had been supplying Later in the session of 1919 the Legislature passes an Act which was known as the Natural Gas Act of 1919 and which contained many regulations and restrictions intended to control and direct the gas companies in their operations Ostensibly the thought in the minds of the legislators was the conservation of the remaining supply but it is significant to note that the first Act as already stated was known as "The Natural Gas Act" whereas it will be found that in 1921 the Legislature passed another Act known as the "Natural Gas Conservation Act," which suggests that even our legislators were progressing in thought and research

The action of the Government in 1919 had the effect of placing the natural gas business in the list of public utilities, although the companies have always maintained that the natural gas business should not be treated in the same manner as other public utilities, and I believe a study of the situation will convince any person that their contention is sound In the first place, the search for natural gas is purely and clearly a mining enterprise, just as hazardous as any other mining enterprise, and no doubt some of you could tell how great that is Not only is the search for natural gas a mining hazard, but after gas has been discovered, it is so elusive that what we appear to have today we may be unable to find tomorrow, whereas in the mining of solid minerals once a paying vein is struck it remains intact until removed

There is no doubt, therefore, that the natural gas business, in a very vital sense, differs from every other public utility Money invested in the search for a supply is very often lost entirely, and the same holds good throughout the operations, for, particularly in these later years, a majority of the wells drilled are either useless or so small as to make it difficult to secure a return sufficient to justify retaining them Then again, the gas company, unlike other public utilities, are dependent upon one source, which begins to diminish as soon as found, and when the gas supply is gone there is no way of renewing it, and the companies must either go out of business or adopt means for producing artificial gas Under the Act of 1921 provision was made for the fixing of gas rates made necessary for the reasons before cited The Government realizing

that having interfered with contracts made between the companies and a large number of industries, and thereby cutting off a large source of revenue to the companies, some provision would have to be made to allow the companies to secure better prices from their remaining consumers. This was a reasonable view to take, in fact the Government could take no other attitude, particularly as the action was taken at the behest of the domestic consumers, and was intended to not only give them a better service, but that for a longer time.

Conservation involves the partial sacrifice of the present to the future. No one can be induced to do this unless the future reward is greater than the present sacrifice. This puts the matter on a business basis, the only basis on which it can be permanently successful.

When natural gas was selling at from five to twenty cents per thousand, or where gas was delivered for cooking and heating an ordinary residence for $12.00 per year, it is obvious that it would not pay the consumer to invest much money, or do much worrying about the amount of gas being consumed; but as prices have increased conservation has fairly well kept pace. Let us now consider what would be a fair price for natural gas. Probably 50 per cent. of the people of the Province of Ontario are dependent upon coal for heating their homes, and when they buy they must go in the open market and pay the price asked. If coal oil or crude oil is required, they also must be bought in the same manner. These fuels, for which natural gas is a substitute are not controlled by prices fixed by the province. This was true also of natural gas, as stated previously, up to the year 1919. As the commodity is now under the control of the Legislature, and provision has been made and for the past four years has been applied fixing the rates we must abide by these regulations, and face the situation as we find it. Under those conditions, and treating the industry as a public utility, I would say first of all, that the consumer should pay a price sufficient to give the company serving them a reasonable and equitable return, and no more.

Before I conclude this paper, I would like to give a few general facts showing the effect of the industry upon the public as a whole, which I believe will stand a rigid comparison with any other industry, in the province.

The amount of capital invested in the natural gas business in the Province of Ontario is approximately forty millions of dollars

A conservative estimate for the year 1923, according to the statement of a disinterested engineer, brings out the following facts For that year substitute fuels would have cost three and one-half times as much as natural gas The loss in money exported to pay for coal and oil would be $4,099,266 The loss in rentals (which were paid by the companies) $112,459 Loss in taxes and wages $889,075 or a total of $5,100,800

This, according to the engineer referred to, would have been the loss sustained by the public if natural gas were not used, and had the companies not existed

A great deal has been said, and references often made to the fact that a number of gas companies in the early days made for themselves large dividends That is admitted but a conservative estimate will prove that for every dollar that the gas companies received in profits four dollars was actually saved by the gas consuming public There are nearly half a million people in the Province of Ontario enjoying the benefits which accrue through the use of natural gas and it is doubtful if any other industry in all of Canada so directly affects as many homes as the natural gas industry

UNVEILING OF MEMORIAL CAIRN

A large number of people from every municipality in the Counties of Lincoln and Welland, and with many from distant places, gathered in the grey, cold afternoon of Saturday, November 29th, 1924 at Allanburg to attend the unveiling of the cairn and tablet erected to commemorate the centenary of the turning of the first sod of the Welland Canal That sod was turned on November 30th, 1824 by George Keefer of Thorold, the first President of the Welland Canal

The cairn is of field stone It stands at the west end of the Allanburg bridge and is very close to if not exactly on the spot where the company gathered a century ago to witness the beginning of what was destined to be a great undertaking great in its relation to the development of this community, and great as a factor in the progress of Canada

THE UNVEILING

It was fitting that the unveiling ceremonial should be so graciously carried out by Miss Catherine Welland Merritt, granddaughter of the Hon William Hamilton Merritt, founder of the Welland Canal, father too, of the first bridge to span the Niagara River and of the Welland Railway

Miss Merritt said:—

"To commemorate the courage vision, patience and energy of the men of this district, who met at this spot to begin a public utility which has brought prosperity and success to our land; also to congratulate their successors on their achievement today, I have the honor to unveil this cairn and tablet This I do with the greatest pleasure

INSCRIPTION

The tablet reads

The Old Welland Canal

Near this spot on 30th November, 1824, the first sod of the old Welland Canal was cut by George Keefer President of the Welland Canal Company, in the presence of William Hamilton Merritt chief promoter of the enterprise and about 200 other persons

The great work, connecting Lake Erie and Ontario for ship navigation was planned and carried out by a private company

DEDICATORY PRAYER

His Lordship Bishop Clark of Niagara recited the dedicatory prayer as follows Present us O Lord, in all our doing with Thy most gracious favor, and further us with Thy continual help that in all our works begun, continued, ended in Thee we may glorify Thy Holy Name and finally by Thy mercy obtain everlasting life, through Jesus Christ our Lord

In the Name of the Father, Son and Holy Ghost, we dedicate this memorial to the Glory of God and in memory of Hon William Hamilton Merritt, George Keefer and his associates, through whose energy and foresight we meet to celebrate the turning of the first sod of the Welland Canal one hundred years ago

The Grace of our Lord Jesus Christ, and the Love of God and the Fellowship of the Holy Ghost be with you all Amen

WARDEN SLOAT

Warden J C Sloat presided over the historic event On the platform with him were Miss Catherine Welland Merritt, Hon F H Keefer, Miss Janet Carnochan, Niagara-on-the-Lake Bishop and Mrs Clark, Ven Archdeacon Perry, O E Fleming, President of Canadian Deep Waterways Association, W M German K C M P, Ed Graves, M P P, and Dr J H Coyne of St Thomas, who represented the Historic Sites and Monuments Board and who was the chief speaker

A LOYAL COMPANY

Enchantment was added to the scene by the presence of the 98th Lincoln and Welland Regimental Band under Bandmaster J

Holden the Welland Sea Cadets, who formed a guard of honor under Instructor Horace Cox the Daughters of the Empire from Welland and St Catharines with their standards and War Veterans from St Catharines and Welland

The programme opened with the National Anthem played by the band and sung by the assembly Then following the unveiling the band playing Rule Britannia, and the historic event closing with the Maple Leaf

An impressive feature of the afternoon was the placing of wreaths at the base of the cairn Floral tributes were placed by the I O D E of Welland, St Catharines, Beamsville and Thorold and the G W V A of St Catharines

RECEPTION

Following the unveiling a reception was given at Oak Hill, the historic Merritt home, by Miss Catharine Welland Merritt Additional interest was lent to this very pleasing event by an exhibit of relics of a century ago chiefly pertaining to the canal These included the first plan of the canal Sir Isaac Brock's chest, leather bound and brass nailed was also shown

ST ANDREW'S DINNER

Saturday evening St Catharines Chamber of Commerce gave a St Andrew's night dinner at the Welland Inn, where several hundred prominent men of the Niagara district assembled A silent toast was drunk to the pioneer canal builders Major H B Burgoyne the President of the Chamber of Commerce presided

Addresses were given by Frank H Keefer, an old Thorold boy, grandson of George Keefer the first president of the canal company Commissioner for Northern Ontario, Lieut-Col W N Ponton of Belleville, Manager Hugh M Bell of the Chamber of Commerce Wm Dakers of St Catharines Mayor Jacob Smith St Catharines and others

DEDICATORY ADDRESS BY J H COYNE M A LL D F R S C, ST THOMAS OF THE HISTORIC SITES AND MONUMENTS BOARD OF CANADA

THE cutting of the first sod for the Welland Canal was an event of no ordinary significance The Department of the Interior acting upon the advice of The Historic Sites and Monuments

Board of Canada has recognized its national importance by the erection of this memorial cairn with tablet and inscription, near the spot where on the thirtieth of November, 1824, George Keefer, President of The Welland Canal Company, in presence of about two hundred persons, cut the first sod of the original Welland Canal. Of that ceremony tomorrow will be the hundredth anniversary.

> Little of all we value here
> Wakes on the morn of its hundredth year[1]

and those who took part, whether as speakers or hearers, in that memorable gathering, upon or near the ground on which we are now standing, have long since passed away. But the spirit of the pioneers of Lincoln and Welland has not passed away; and their descendants are here today to join in paying honor to the leaders in that great undertaking. From other parts of the province also representative men and women are present to unite in this public tribute of remembrance and praise.

On the earlier occasion the outstanding figure and principal speaker was William Hamilton Merritt, originator and chief promoter of the enterprise. We are fortunate in having with us at this gathering grandsons of both Mr. Keefer and Mr. Merritt, and also the latter's grand-daughter, Miss Catharine Welland Merritt. It was eminently fitting that Miss Merritt should have been chosen for the high honor of unveiling the memorial and on behalf of the Department and the Board I have to thank her for having so graciously acceded to the request that she should do so.

The story of the Welland Canal and Merritt's connection with its inception and promotion is full of interest and instruction. It is to be found in many publications of which one of the latest is General Cruikshank's admirable monograph. It has been concisely told in excellent special articles in the local and Toronto press. Fortunately, this renders it unnecessary for me to do more, in the short time at my disposal, than to present a few salient features.

The War of 1812 emphasized the imperative necessity, from the military point of view, of a canal system for the St. Lawrence and the lakes. To young Merritt the idea seems to have come in 1812, while engaged, as an officer of dragoons, in patrolling the bank of the Niagara. He was then a youth of nineteen. In 1806, in be-

came a practical question through the need of a satisfactory water supply for his mills at St. Catharines. But his views extended far beyond mere personal advantage. Across the Niagara frontier the projected Erie Canal was beginning to become a reality. In seeking public support its promoters claimed, that it would attract to the city of New York the entire traffic of the north and northwest, including that of the Canadians north of the lakes. To guard against such a contingency, immigration from the States was discouraged, and every effort was made to attract immigrants from the British Isles to the new settlements in Upper Canada. But in any case, what would be the result, if the only outlet for their products to the European market was through the United States by the Erie Canal and the port of New York? With statesmanlike vision, Merritt saw the political peril confronting the nascent British communities, and from that time forward he devoted himself to the truly patriotic policy of an all Canadian route to the sea for the products of Canada. As a Loyalist to Loyalists, he advocated earnestly and persistently the imperial as well as the commercial advantages of the construction of a canal between Lakes Erie and Ontario. He proceeded to enlist the support of leading public men, business interests and representative bodies in the scheme. It was denounced as wild and visionary. It was opposed by selfish personal and jealous local interests. Even more difficult to overcome was, in the early stages the indifference, the inertia, of the public. It was a long and uphill fight, but step by step, he won out at last. Undaunted by rebuffs, delays and failures, which might easily have disheartened a weaker man, he proved himself

"One who never turned his back, but marched breast
forward,
Never doubted clouds would break,
Knew we fall to rise, are baffled to fight better,
Sleep to wake."

Final success gave him the honored place he rightfully holds among the statesmen of British America. The canal now under construction is fourth in order from its primitive original, for which the first sod was cut one hundred years ago. Its ultimate expansion to meet the demands of the future will, doubtless, surpass our dreams of today. Advances will be made in naval architecture

and the machinery of propulsion, land air and water will compete for the transportation of the world's commerce But in the centuries to come, however distant they may be, it is within the bounds of human probability, that the Welland Canal will continue to bear upon its bosom great ships greater than those of today, laden with the commerce from all the ports and oceans of the world And always with the Canal will continue to be associated the name of William Hamilton Merritt It is pleasing to note that the filial piety of a grandson, the late Colonel W H Merritt, has provided a fund for a more imposing monument to be erected elsewhere at an early date to the memory of the founder

Although it was not until 1824 that the first sod of the canal was cut, the initial step towards its construction had been taken six years before, in a memorable experimental survey, undertaken by Mr Merritt accompanied by Mr George Keefer, Mr John DeCew and other friends A line for the contemplated excavation was run with the aid of a primitive water level, borrowed from a neighboring mill It is not surprising to learn that a height estimated by the amateur surveyors as thirty feet turned out to be actually sixty feet by later expert measurements The original plan of that first survey is still in existence in the family archives It is an historical document of national importance

Time would fail me here to make more than the briefest mention of the long continued efforts to finance the project He enlisted the sympathy and support of members of the legislature such as Robert Nichol and Mahlon Burwell, John Beverley Robinson and his brother, Peter Robinson The Hon John Strachan was zealous in the movement Merritt paid repeated visits to the centres of capital, Montreal and Quebec, New York and London The Governor-General, Lord Dalhousie the Lieutenant-Governor, Sir Peregrine Maitland in Canada, DeWitt Clinton, Governor of New York, entered heartily into the scheme He won the support of the Quebec Chamber of Commerce the legislatures of Upper and Lower Canada, the London Times and the British Parliament John Jacob Astor in New York and Rothschild in London enthusiastically approved the venture but restrained their enthusiasm from materializing in dollars and pounds Other New York capitalists would have gladly subscribed the entire amount necessary,

but Merritt was determined to keep the control in British and Canadian hands Little financial help could be expected from Upper Canada The province was poor, settlers were few and far between An official map of 1813 shows the towns of Niagara and York, but not a single village or hamlet between them and Burlington Bay Such trade as there was, was carried on largely by barter money being conspicuous by its scarcity Of the original capital of 40 000 pounds only one-fourth was taken up in Canada When the first sod was cut, Keefer and Merritt had paid up on their shares $25, and DeCew and Thomas Butler $12 50 each Such were the small beginnings of the great undertaking which in its later development has resulted in the magnificent Welland Canal system now in operation, representing a total outlay to date of some $80 000 000, and intended to provide in the immediate future for the passage of great ocean steamers drawing twenty five and ultimately, if needed, thirty feet of water

The Erie Canal was completed in 1825, Merritt lost no time in proceeding with his work In November, 1829 by utilizing the Welland and Niagara Rivers vessels drawing seven and a half feet were able to pass from lake to lake the canal being then completed from Fort Dalhousie to the Welland River Gaily bedecked with flags, they were greeted with enthusiastic welcomes by the admiring inhabitants lining the banks whose wildest dreams had come true

Meanwhile other canal projects embracing the St Lawrence, the Ottawa and the Rideau, were being actively prosecuted, and thus was inaugurated what may well be called the greatest canal system in the world Altogether, according to a recent statement, Canada has expended on her canals alone more than two hundred millions of dollars, and can boast of 465 miles of completed canals, with 159 locks This mighty achievement, representing a century of progress owes its initiative to William Hamilton Merritt and his associates

The fact should not be overlooked, that the original canal was financed and built by a private company It was only in 1842, that it was taken over by the government, and in 1852 that the repayment to the shareholders of the amount of their subscriptions with six per cent interest was completed By that time $800 000 had been expended upon the undertaking

Merritt's patriotic idealism and proved business ability combined to give him the leadership as member of the legislature and in public and private enterprises, in practically all matters relating to transportation, whether by land or water. To borrow the words of the late Colonel W. H. Merritt, referring to his ancestor:

"He projected and carried to successful completion the first railway Suspension Bridge in the world, spanning the gorge of the Niagara, 1846-55; and the Welland Railway, 1855-58. He was the proposer and first chairman of the St. Lawrence Canals Commission, 1832, advocated the Sault Ste. Marie Canal, was principal promoter of the first railway charter in Canada, the Niagara and Detroit Rivers Railway Company, 1835-46, assisted the Great Western Railroad, 1846, advocated daily fast Atlantic Steamships, and gave impetus to many important improvements as President of the Council, 1848, and Commissioner of Public Works, 1850, in the Government of Canada."

The title of Father of Canadian Transportation may be fairly claimed for him. Seven times he was elected to the Legislature. For the last two years of his life he was a member of the Legislative Council. He had rendered distinguished service as an officer of Dragoons in the War of 1812. He was present at the Battles of Queenston Heights, Niagara, Stoney Creek and Lundy's Lane, and missed by a day being at the taking of Detroit, being delayed by military duties. Such a record of public service entitles him to a rank second to none among the makers of Canada.

The first settlers in the region now traversed by the Canal were men belonging to the famous Butler's Rangers, who were disbanded in 1784. They were largely pre-Loyalists, having their winter quarters at Niagara during the Revolutionary War, and from that centre carrying on their military operations. Their story has been effectively told by General Cruikshank in a pamphlet published many years ago through the liberality of the Welland County Council. Accusations brought against the Rangers by partisan historians have been shown by the General to have little or no substantial foundation. They and the later Loyalists, who, after the revolution, abandoned home and property, the friends and associations of a lifetime, to hew out new homes in the northern wilderness, become the founders of British North America. They

brought with them their British laws and institutions, a profound sense of religion, a loyalty to the unity of the race and empire and intensified by their sufferings and sacrifices an ingrained abhorrence of treason As Britons, they combined the love of law and order with the love of liberty, and that love they transmitted to the generations that followed

The Revolutionary War had, as a consequence of the unsuccessful attempt to detach the French Canadian habitants from their allegiance to the British Crown, resulted in the elimination of many politically disaffected persons from the population of the lower province The War of 1812 had had a like effect in the upper province as well Successive invasions and plundering expeditions had united the inhabitants in a common feeling of animosity against the United States, and of intensified loyalty to the king and mother country It was only after many years of peaceful relations that a real friendship was re-established between Canada and the great republic The idea of a national Canadian sentiment hardly existed But the war, in bringing together in defence of their common country, settlers from the scattered and widely isolated communities, had created or increased a feeling of common interest in the land, that had required and might again require their common effort in a common defence And so the War of 1812 may be said to have been the first step in the evolution of a Canadian as distinguished from an imperial patriotism The feeling was not likely to be lessened by the avowed desire, on the part of the advocates of the Erie Canal to bring Canada under the control of the States, and as a consequence, into the Union Thus the Welland Canal project in addition to the natural hope and expectation of increased land values and other business advantages, appealed to the loyalty and patriotism of Canadians The general interest was widened and deepened by the advocacy and practically simultaneous construction of the St Lawrence Ottawa and Rideau Canal Systems, including the Lachine Canal Closer business and political relations attended and followed their construction and enlargements, and there gradually emerged in all the scattered provinces, a feeling of common nationality, which was at last crystallized in the union of all British North America, except Newfoundland, in the Confederation we have today In the early de-

velopment of the national ideal of a united Canada in loyal allegiance to the crown, and the wider ideal of a united empire rallying around the central throne, the influence of the Welland Canal may be regarded as one of the most important factors.

Now that Canada has taken a recognized place, as equal among equals, in the British Commonwealth of Nations, known as the British Empire, realizing the dream of "Canada First" and other visionaries of half a century ago, it is well to remember the contribution of Butler's Rangers and the United Empire Loyalists to the wonderful political aggregation, which today ranges itself under the sovereign of Great Britain and the imperial flag. For they were the first to proclaim the principle of the unity of the British race and the British dominions under the sovereign and banner of England throughout the Seven Seas. For a century and a half, whether the sky was bright and clear or war clouds obscured the sun for a season, they and their descendants have maintained the principle, and, when required, have sealed it with their blood. In its defence, as well as in the defence of their homes, they fought against mighty odds in the War of 1812. The history of nations shows, that as the twig is bent, the tree is inclined. Strengthened by the large immigration from the British Isles, bringing the same ideals, the same respect for religion, and for law and order with British liberty, the influence of the Loyalists has been felt for good, through the course of our national history. If Lynch Law has never been known in our Dominion, if train robberies have been so rare as to be almost unknown, if crime is repressed and punished to a degree unknown elsewhere on this continent, the credit is due in large measure to the tradition of respect for law and order handed down to successive generations of Canadians from the heroic men and women, who sacrificed all rather than their allegiance to a high and noble ideal. It was for the unity of the Empire, as well as the preservation of their province, and later of the Dominion of Canada, that Canadians put down with the strong hand, the insurrections of 1837 or 1870, of 1885, and repelled the Fenian invasions of 1866 and 1870. To maintain the principle of a united empire, Canadian soldiers sealed their loyalty with their blood in the Crimea and on the African veldt. In adherence to the same principle, Canada effected a reduction in imperial postage rates, and adopted the sys-

tem of imperial preference in import duties. Foremost of the Dominions in the councils of the empire she has ever been first in its defence. The great imperial poet recognized that primacy, nearly a generation ago, in prophetic words:

> "They who are wise may follow
> Ere the war trumpet blows
> But I, I am first in the battle,
> Said Our Lady of the Snows."

And so, when the war trumpet blew in 1914, Canada was first of the overseas dominions to range herself beside the Motherland. The victorious issue of the World War toppled many thrones, but the stability of our empire remained unshaken. Its bounds and its responsibilities are enlarged, its liberties extended. Canada finds herself in the first flush of world-recognized nationhood, and at the same time in still closer relationship with her sisters in the British Commonwealth, and with allegiance to the person and throne of the king and the flag of the empire unimpaired. Toward this consummation, the United Empire Loyalists, the pioneers of Lincoln and Welland, with William Hamilton Merritt, their most famous citizen, and the wonderful canal system he inaugurated, contributed in no slight degree. We are here to pay them their due of honor and remembrance.

Could the founders of this settlement be with us today, to counsel and advise, what would be their lesson and message to their descendants, and those who are to follow? Would it not be to the effect expressed by the poet in lines well-known to many among you:

> Hold ye the Faith—the Faith our fathers sealed us,
> Toying not with visions—overwise and overzeale
> Except ye pay the Lord
> Single heart and single sword,
> Of your children in their bondage shall He ask them
> treble-tale
> Keep ye the Law—be swift in all obedience—
> Clear the land of evil, drive the road, and bridge
> the ford
> Make ye sure to each his own,
> That he reap where he hath sown,
> By the peace among our peoples, let men know we serve
> the Lord!

THE EARLY HISTORY OF ST JOHNS

By J F Gross

A number of years ago, while driving in the St Johns Valley with a friend from the State of Louisiana, as we crossed the spring-creek he told me to stop He got out and asked me if that water was good to drink I said "Yes" He asked, "Does it run all the year round?" I said, "Yes, it is August and it never gets any smaller than this" He said, "I would give $10 000 to have that creek run through my plantation" He then went on to say that he owned a tobacco plantation in the flats along the Mississippi river in the State of Louisiana, and that there wasn't a drop of drinking water on the whole plantation, except cistern water, and, as a matter of fact, he stated that they brought all their drinking water in bottles from the nearest city This incident always made me appreciate the spring creeks and brings me to the village of St Johns

The village is situated in the Township of Thorold, about two and one-half miles north of the village of Fonthill and six or seven miles south westerly from the city of St Catharines

The only historical reference I have been able to find regarding the village is on a map published by George R and G M Tremaine, dated 1862, which states that George Brooks is proprietor of the grist and saw mill, R Collins & Sons proprietors of the Woollen factory and iron foundries, Charles Fell is a merchant, John Wilkinson is proprietor of iron foundries and manufactures stoves, plows and other agricultural implements

This map gives an illustration of Collins woollen factory and foundry, which shows a four-storey woollen factory, a large foundry and two large warehouses Running through the village from Fonthill is a beautiful spring-creek which has its rise in the

village of Fonthill, flows the year round and is of sufficient volume and has enough fall for power purposes in a small way.

The main street of the village running nearly east and west, forms part of the Dundas road, a highway on which stage-coaches ran from Fort Erie to Dundas before Hamilton was in existence.

The village appears to have reached its height of prosperity about the year 1840, and mills had been erected, supplied by power from the creek, as far back as the latter part of the eighteenth century. Records in the registry office show, and old residents say, that at this time there was a Wesleyan-Methodist Church and an Episcopal Methodist Church, there was also a large hotel or road-house, there were several large general stores, a tannery, harness shop, wagon and carriage shop, blacksmith shop, one or two saw mills, two grist-mills, several woollen mills, and one or more carding mills.

St. Johns was in its prime before Welland was started. The building of the Welland Canal feeder, which gave the little hamlet of Merrittsville water power, was one of the causes of the growth of Merrittsville, now Welland, and of the decadence of St. Johns. There is on file in the registry office, an old plan prepared by Zenas Fell, of an improved highway called the St. Johns, Fonthill and Merrittsville Plank Road. The road was to be constructed of heavy plank ten feet long, laid on substantial stringers. Part of this road was actually built and is now the highway running north from Aqueduct Street, still commonly known as the Plank Road.

The power at this early date was developed by means of overshot water wheels, the only style of water wheels at that time in use. In these early days more men were employed in the several factories owing to the large amount of hand-work instead of machinery. For instance, a wagon or buggy would be built complete, the wheels, iron work—all being turned out by hand.

The village at this time had quite a large population. The residents appear to have lived comfortably and to have been contented and happy.

The Court House in Welland, erected in 1856, was heated with stoves, made in St. Johns, and if the writer is not mistaken one of these stoves is still used for heating purposes in the township hall at Ridgeway, in the Township of Bertie.

Zenas Fell, a land surveyor, was one of the early settlers in the village of St Johns Charles Fell one of his sons, carried on a general store there for many years The Tuckers also carried on a general store in St Johns

Today, St Johns may aptly be called The Deserted Village There is one grist-mill still standing, but it has been dead for about thirty years The last carding mill later known as the Pitts mill, in the west end of the village, which though complete with its machinery, has not been running for a good many years, and was torn down this summer The writer was fortunate enough to obtain a photograph of the old over-shot water wheel just before it was torn down

The population has dwindled to about twenty or thirty people Both churches have been torn down or removed The cemeteries are uncared for The old Zenas Fell homestead, which is situated on the south side of the Dundas road or Main Street of the village, is being torn down this summer This gentleman's residence, which must have been built seventy or eighty years ago, has not been occupied for the last ten or twelve years, and presented a splendid example of old-time carpentry and masonry The front entrance to the old house, the main part of which is still standing, though surrounded and grown up with shrubs, is handsome, and when one considers that all the mouldings, sashes and doors were made entirely by hand, shows that the carpenters of the old days must have served a long apprenticeship The stairway in the front hall is winding, with a walnut rail and light walnut balusters, and it would worry many of the craftsmen of today to build it Between the parlor and sitting-room are fireplaces which, together with the hearth, are built of cut stone with a black wood mantle, one fire place in the parlor and one in the sitting room, and though unoccupied and unlocked, a tablet bearing the name Zenas Fell in large raised letters, was on the parlor mantle up to a year ago The kitchen of this old homestead is large and has a fire-place with a swinging crane for use in cooking, and a smaller brick oven at one side for baking bread, cakes, &c The kitchen fire-place was so deep that the sides were built in as cupboards or shelves

Nearly everyone has left St Johns Apparently what has happened to St Johns has happened to almost every other small

rural village in the Niagara Peninsula, and probably throughout the province

In the old days when the only power was wind and water, the early settlers availed themselves of even the smallest water power and St. Johns was particularly favored from the fact that the stream there supplied power the year round, while many of the streams, especially the Twelve-mile creek at Jordan, only supplied water through the spring and fall.

The early settlers, therefore, built their mills at the point of the water supply. The building of the railways stopped the traffic on the Dundas highway. The coming of the steam engine allowed the mill owners and manufacturers to locate their factories at the most convenient point and operate them cheaply by steam, as wood, the fuel then used, was very cheap.

It must be remembered that the saw mills of these old days were not the saw-mills of today. The saw went up and down, the power being supplied to the bottom of a frame large enough for the log to pass through and which the water wheel pulled down and a large wooden spring pulled up. It took time to saw a board. The writer remembers one of them run by one man. He would start the saw cutting at the log and then go away, having a string attached to the gate of the waterwheel at one end and to the log carriageway at the other, so that when the saw got through the log the carriage would pull the cord, drop the gate to the water-wheel, which would stop, and the old man would come back, carry away the board that was cut and re-set it, start the mill cutting—and even at that he cut quite a lot of boards in a day; and while the saw millers of today might turn up their noses at the old man's mill, he certainly would laugh at some of the logs they try to cut into boards today. In those days you did not bring a log to mill that was not fit to make shingles.

What prosperity the steam-engine left to St. Johns has been absolutely taken away by the development of electrical power, and the only hope the writer sees for the future of the village is to develop its natural resources in the way of parks and public playgrounds and as a summer resort. One may travel from Nova Scotia to British Columbia and not find more beautiful scenery than in the St. Johns-Effingham valley. The streams could be controlled

in such a way as to make splendid bathing pools for the children with all the advantages of the Great Lakes without the danger In the meantime we may say of the St Johns-Effingham brooks

Men may come and men may go,
But I go on forever '

THE HISTORY OF THE NIAGARA GORGE

By D D Gross

Many books have been written on the Niagara Gorge and it will only be possible to touch briefly on a few of the most outstanding characteristics of this one of the most wonderful of Nature's masterpieces

The natural beauties of the Niagara River throughout its entire length are less appreciated by those in close proximity than by the thousands of tourists who travel each year from the four corners of the globe to see them

Some time ago I became rather curious as to why and how this river came into existence and into its present formation and I made some investigations the results of which it is the purpose of this article to relate

To find the origin of this river and gorge we must travel back many thousands of years into the past, how many thousands geologists hesitate to say At one time this whole district was covered with a glacier in what is known as the "Wisconsin Ice Age" This barrier of ice is estimated to have been about 3000 feet thick The Niagara district remained continuously under the burden of the ice not only during the entire time that the front of the ice sheet was retreating from a point about ten miles north of the Ohio River at Cincinnatti to Niagara Falls but during an equally long time probably in the period of advancement

Shortly after the retreat of the ice had uncovered the present site of the Niagara Gorge this district was covered with water This condition continued until the further retreat of the ice which was retreating in a north-easterly direction opened an outlet on the northward sloping hills south of Syracuse, N Y The result of this new outlet was that the waters in the Lake Ontario basin

were drawn down to a somewhat lower level than the present level of Lake Erie This completed the separation of Lake Erie from Lake Ontario and inaugurated the flow of the Niagara River and Niagara Falls began the work of making the Gorge at the escarpment at Queenston

In addition to the flow through the Lewiston spillway four other spillways were instituted at the same time, one at Holley, N Y one at Medina N Y , one at Gasport N Y and the fourth at Lockport The life of each of these spillways was comparatively short as they were no doubt smaller than the Lewiston spillway which wore its way into the rock much more quickly than the others and has become the only outlet for the waters of the Great Lakes

The process of gorge-making is interesting The gorge has been and is being elongated by boring at the base of the Falls where the heavy mass of falling water strikes at the end of its vertical descent The softer strata are slowly worn away by the impact of the water itself, but the hard capping layer is removed chiefly by undermining until it falls away in huge blocks The blocks which drop in the caldron at the foot, become highly efficient tools for grinding away the shale for no doubt many of them spin around in the violent current like pestle stones in the making of potholes

When the falls had large volume and full height the thinner, hard layers were bored through and removed, but when the height of the falls was reduced as it was in one part of the gorge, or where the water sheet passing over the crest became thin, as it did in several places parts of these beds were not removed and now form benches or terraces When the volume of the river was relatively small as it was in two sections of the gorge these layers were not bored through by one vertical plunge but in all probability formed separate cataracts, one for each hard layer As Spencer has pointed out this was probably the condition for a time in the older part of the gorge north of the Niagara University After the relatively narrow shale section of the gorge had been made by the small cataract, the rush of the volume of the river through these sections deepened them still further by the slower and very different process of chute or rapids erosion The deepening of the old narrow gorge north of the Niagara University has been substantially completed in this way, that of the gorge whirlpool rapids is now in progress

Of very great importance in understanding the history of the gorge is the relation of the Great Lakes to the history of the Niagara River, which with the exception of a few small streams, furnish the whole source of the supply of water for the River.

Since Niagara River first began, the Great Lakes have passed through five different stages each stage having a different outlet than that of the preceding stage and the volume of water discharged from the Niagara River varied with each change.

The first stage is known as the "Early Lake Algonquin Stage." This lake occupied the south half of the Lake Huron basin and received a considerable amount of water from the lakes in the Georgian Bay district and Lake Simcoe district. At this time the ice barrier spanned Lake Huron from side to side and no water was received from the Lake Michigan or Lake Superior regions. The volume of discharge was probably equal to the present discharge due to the tributaries coming in directly from the ice sheet. It was during this period that the first or oldest section known as the "Lewiston Branch Gorge" was created. This gorge extends about 2000 feet south from the mouth of the gorge. The average top width is about 1300 feet, its depth is about 500 feet, to the bottom of the river which is 120 to 150 feet deep and 600 feet wide.

The second stage of the Great Lakes is known as the "Lake Algonquin Kirkfield Stage." This lake occupied the basins of Lakes Superior, Michigan and Huron, in addition to some low-lying lands bordering upon them. It did not attain its full extent in this stage however because the ice barrier still occupied large areas lying at its northern side so besides carrying the full discharge of the upper Great Lakes, Lake Algonquin at this time received a large flow of water directly from the ice sheet and its total discharge was probably greater than the present volume of the St. Clair River. The outlet was Kirkfield, Ontario down the valley of the Trent River to glacial Lake Iroquois, which was in part a contemporary of Lake Algonquin. Lake Iroquois occupied the Lake Ontario basin and extended to the foot of the escarpment at Queenston. During this period the second section of old narrow gorge was formed. This gorge extends from the south end of the first section to the bend at Niagara University, a distance of about 1 1/8 mile, the top width is about 1200 feet, the depth to the bot-

tion of the river is nearly 400 feet, the river is about 500 feet broad 60 to 70 feet deep and quite turbulent The flow of the Niagara River at this time consisted only of the discharge of Lake Erie or about 25 per cent of its present volume

The third period or stage of the Great Lakes is called the "Lake Algonquin-Port Huron Stage" The extent of Lake Algonquin in this period was about the same as the earlier stage There was a general uplift of northern lands which shifted the outlet from Kirkfield to Port Huron This same uplift raised considerable areas above the level of the lake but a greater area was added by the gradual retreat of the ice sheet In the early part of this period Lake Algonquin received a considerable inflow directly from the ice sheet but in the latter part the ice sheet had become so small that its contributions were insignificant In the first half of this period there was a large discharge at Chicago as well as at Port Huron but in spite of this the flow at Port Huron was slightly larger than the present river During the first portion of the period the flow of the river was slightly larger than at present and in the second half a trifle less on account of the Chicago discharge and the Niagara River was affected correspondingly

It was during this period that the Lower Great Gorge was formed This gorge extends from the bend below Niagara University, where the gorge widens to the upper side of the Eddy Basin Its width between the cliff lines from the bend south about 1000 feet averages more than 1600 feet and at the widest is about 1825 feet Above the north end of Wintergreen Terrace the width is from 1300 to 1500 The extra width is due partly to the augmented volume of the river and partly to the wide flat floor above the falls, which caused the water sheet to be spread to unusual width During this period geological changes caused Lake Iroquois to be about 125 feet higher than the present level of Lake Ontario and at a later time in the period the lake again receded

These changes occurred when the falls was at the head of Foster's Flats There is a reef which produces the sharp rapids at the outlet of the Whirlpool which owes its origin to the breaking away of the east wall of the Whirlpool before the vertical fall had time to carve out the sand stone at its base, then continuing their work the falls cut out the Eddy Basin before the volume of the river was reduced

The fourth stage of the Great Lakes is known as the "Nipissing Great Lakes." It was caused by the withdrawal of the ice sheet from the Ottawa Valley. These lakes consisted of the three upper lake basins and their area was only slightly larger than the present lakes. The outlet during this stage was east from the northern parts of the Georgian Bay region, its head being at North Bay Ontario. The scouring effects of the outlet river was well marked in the valleys of the Mattawa and Ottawa rivers and indicate a river having the same volume as that of the present St. Clair River. During this period the gorge of the Whirlpool Rapids was formed. This gorge is about three-quarters of a mile long and extends from the upper side of the eddy basins to the head of the gorge just above the railway bridges. The average top width is about 750 feet; the average width at the water line is about 250 feet. During the formation of this gorge the river carried again only the discharge of Lake Erie.

The fifth stage of the Great Lakes is the "Present Great Lakes Stage." The continued uplift of lands in the north raised the outlet at North Bay and again sent the discharge of the Upper Lakes to Port Huron. In transition, it is probable that both outlets were active at once but this apparently did not last long. The change of outlet to Port Huron brought the Nipissing great lakes to an end and inaugurated the present system which has continued ever since.

The gorge created, and in process of creation, runs from just above the railroad bridge to the Horseshoe Falls. It is about two and one-quarter miles long and its average width north of the American Falls is about 1350 feet, widening opposite the American Falls to 1600 feet. The depth of the river is about 180 to 200 feet.

It is interesting to note a few of the characteristics of the Whirlpool. It has long been recognized that the rock basin of the Whirlpool is older than the remainder of the present Niagara Gorge, and has a very different history. It is a buried drift-filled gorge of the inter-glacial age. The walls surrounding it on the east and west sides are rock cliffs but on the north and northwest sides the entire wall, from the top down to an undetermined depth, is composed of sand and gravel. South of the village of St. Davids there is a strongly marked re-entrant in the front of the escarpment,

the head of which shows no rock for about a mile, but is a steep and much-gullied slope of drift. One cannot resist the impression that this buried gorge was made by an inter-glacial Niagara, substantially identical in volume with the present Niagara Falls. Then came the last ice sheet completely filling the old gorge which has been uncovered by the present cataract.

Various estimates have been made by geologists as to the age of the Falls. In 1841 Lyell estimated the age of the Falls to be 35,000 years. Surveys made since then afford some basis for calculation. In 1894 Spencer calculated the total duration to be 32,000 years, but in a later report in 1907 he makes it 39,000 years. The present rate of recession of the Horseshoe Falls is estimated to be 5.5 feet annually, while that of the American Falls is only 2 feet for the same period. This is accounted for by the fact that approximately 95 per cent. of the water flows over the Horseshoe Falls, leaving only a small portion for the American Falls. The average depth of water on the American Falls is about 18 inches with a maximum depth of 3.5 feet, while the estimates of depth of the Horseshoe Falls run from an average depth of 6 feet to a maximum depth of 20 to 25 feet.

In closing I wish to pay tribute to those geologists and writers whose investigations and efforts have put the information I have just given, at our disposal. They are E. M. Kindle and Frank B. Taylor of the United States Geological Department, also J. W. Spencer who has written a book entitled "The Falls of Niagara."

GOVERNOR SIMCOE VISITS WELLAND

By Ernest Green, Ottawa

It is, perhaps, not generally known that Colonel John Graves Simcoe, first Lieutenant-Governor of the Province of Upper Canada, once visited the site of the future city of Welland. The presence here of the representative of His Majesty King George III was made the occasion of no special ceremony or celebration—chiefly because there was no one here at all to raise the customary flag, fire the usual salute or bore His Excellency with an address of welcome. The banks of the Welland River (then newly so-christened by Simcoe himself) were clothed with unbroken virgin forest.

Simcoe, on his part, probably paid no particular attention to the spot where the future county town was to stand. Perhaps he noted that there was a big bend in the stream just here, but we cannot suppose that he had any vision of a canal and aqueduct, of a mass of industries or of a populous community with a court house in its midst. To Simcoe's mind, court house would merely recall the vexing problem of how the embryonic town of Newark was to be provided with judicial buildings of sufficient size to serve the whole country between the Trent and Long Point.

Simcoe's mode of approaching Welland's site was unique. No Governor of later days has come to us in the same way nor from the same direction. Simcoe came down the Welland River in a canoe.

It was in the early autumn of 1795. The head of the new province was vigorously carrying on his exploratory work of all the regions lying north of York (Toronto) and westward to the Detroit frontier. The summer had been intensely hot and the humidity of the forest-clad lowlands and the lake made Navy Hall an uncomfortable dwelling-place, so the Simcoes had been board-

ing, since the twelfth of August, at the house of Mrs Tice, widow of Major Gilbert Tice which was on the Portage Road in Stamford, not far from the present Half-way House On the 25th Simcoe, though in poor health, planned an exploratory trip to Long Point and the Grand River (which he had named the Ouse), and his wife and little son accompanied him to Fort Chippawa, where they passed the night, and on to Fort Erie the next day, the Governor having an acute attack enroute which compelled him to rest in a farm-house for some time

At Fort Erie they lodged at a farm-house two miles back of the post On the 29th Mrs Simcoe and little Francis started back to Stamford while her husband set off up the lake Of his adventures during the next two weeks, Mrs Simcoe's Diary gives this brief account

> "Sat 12th Sept —The Governor returned and is far from well He was pleased with Long Point, which he called Charlotteville, the banks on the lake 150 feet high, on the shore grew weeping willows covered with vines, he gathered some grapes already sweet He returned up the Grand River from thence crossed a short portage into the Welland, which he descended to Fort Chippawa He went part of the journey on horseback, and was much annoyed by passing wasps' nests The wasps stung the horses terribly."

So there you have all that we know about it It is highly improbable that the Governor, feeble of health, weary from an arduous journey through the wilderness and tormented by wasp stings, would pause to spend another night under canvas when within ten miles of Fort Chippawa and fourteen from his wife and son He arrived home on September 12th and we may assume with confidence that it was on that day he was paddled by the site of future Welland He was the first man of note known to have visited this spot

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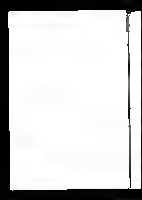

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ಅಂಗಡಿ ಮುಂಗಟ್ಟುಗಳ ಮತ್ತು ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆಗಳ ಅಧಿನಿಯಮ, ೧೯೬೩

ಅಧಿನಿಯಮ ಸಂಖ್ಯೆ ೪೭ ೧೯೬೩

ಅಂಗಡಿ ಮುಂಗಟ್ಟುಗಳ ಮತ್ತು ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆಗಳ ಕೆಲಸದ ಅವಧಿಯನ್ನು ಮತ್ತು ಅಲ್ಲಿ ಕೆಲಸ ಮಾಡುವ ವ್ಯಕ್ತಿಗಳ ಸೇವಾ ಷರತ್ತುಗಳನ್ನು ಕ್ರಮಬದ್ಧಗೊಳಿಸಲು ಮತ್ತು ಅವುಗಳಿಗೆ ಸಂಬಂಧಪಟ್ಟ ವಿಷಯಗಳಿಗೆ ಉಪಬಂಧ ಕಲ್ಪಿಸಲು ಅಧಿನಿಯಮ.

ಭಾರತ ಗಣರಾಜ್ಯದ ೧೪ನೇ ವರ್ಷದಲ್ಲಿ ಮೈಸೂರು ರಾಜ್ಯ ವಿಧಾನ ಮಂಡಲದಿಂದ ಈ ಕೆಳಕಂಡಂತೆ ಅಧಿನಿಯಮಿಸಲ್ಪಡಲಿ.

೧. ಸಂಕ್ಷಿಪ್ತ ಹೆಸರು, ವ್ಯಾಪ್ತಿ ಮತ್ತು ಪ್ರಾರಂಭ. (೧) ಈ ಅಧಿನಿಯಮವನ್ನು ಅಂಗಡಿ ಮುಂಗಟ್ಟುಗಳ ಮತ್ತು ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆಗಳ ಅಧಿನಿಯಮ, ೧೯೬೩ ಎಂದು ಕರೆಯತಕ್ಕದ್ದು.

(೨) ಇದು ಮೈಸೂರು ರಾಜ್ಯದಲ್ಲಿ ಎಲ್ಲಾ ಅಂಗಡಿ ಮುಂಗಟ್ಟುಗಳಿಗೆ ಮತ್ತು ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆಗಳಿಗೆ ಅನ್ವಯವಾಗತಕ್ಕದ್ದು.

(೩) ಇದು ಸರ್ಕಾರವು ಅಧಿಸೂಚನೆಯ ಮೂಲಕ ನಿರ್ದಿಷ್ಟಪಡಿಸಬಹುದಾದ ದಿನಾಂಕದಂದು ಜಾರಿಗೆ ಬರತಕ್ಕದ್ದು.

೨. ವ್ಯಾಖ್ಯೆಗಳು. ಈ ಅಧಿನಿಯಮದಲ್ಲಿ ಸಂದರ್ಭವು ಬೇರೆ ರೀತಿಯಲ್ಲಿ ಅಗತ್ಯಪಡಿಸದಿದ್ದರೆ,

(೧) "ಅಂಗಡಿ ಮುಂಗಟ್ಟು" ಎಂದರೆ ಯಾವುದೇ ಸ್ಥಳದಲ್ಲಿ ಸಗಟು ಅಥವಾ ಚಿಲ್ಲರೆ ವ್ಯಾಪಾರ ಅಥವಾ ವ್ಯವಹಾರ ಅಥವಾ ವೃತ್ತಿಯನ್ನು ನಡೆಸಲಾಗುವ ಅಥವಾ ಸೇವೆಗಳನ್ನು ಒದಗಿಸಲಾಗುವ ಯಾವುದೇ ಆವರಣ ಮತ್ತು ಅದರ ಜೊತೆಗೆ ಅಂಗಡಿ ಮುಂಗಟ್ಟಿನ ಮಾಲೀಕನು ಅಥವಾ ಅವನ ಕೆಲಸಗಾರರು ವಾಸಿಸುವ ಆವರಣವನ್ನು ಒಳಗೊಂಡಂತೆ ಅಂಗಡಿ ಮುಂಗಟ್ಟಿಗೆ ಸೇರಿದ ಆವರಣಗಳು ಎಂದು ಅರ್ಥೈಸತಕ್ಕದ್ದು;

(೨) "ಕೆಲಸಗಾರ" ಎಂದರೆ ಯಾವುದೇ ಅಂಗಡಿ ಮುಂಗಟ್ಟಿನಲ್ಲಿ ಅಥವಾ ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆಯಲ್ಲಿ ಕೆಲಸ ಮಾಡಲು ಅಥವಾ ಕೆಲಸ ಮಾಡಿಸಲು ಅಥವಾ ಸೇವೆಗಳನ್ನು ಒದಗಿಸಲು ಅಥವಾ ಒದಗಿಸಿಕೊಳ್ಳಲು ಯಾವುದೇ ಸಂಬಳ ಅಥವಾ ಸಂಭಾವನೆಗಾಗಿ ನೇಮಕಗೊಂಡ ಯಾವುದೇ ವ್ಯಕ್ತಿ ಎಂದು ಅರ್ಥೈಸತಕ್ಕದ್ದು;

(೩) "ಮಾಲೀಕ" ಎಂದರೆ ಯಾವುದೇ ಅಂಗಡಿ ಮುಂಗಟ್ಟಿನ ಅಥವಾ ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆಯ ಮಾಲೀಕನು ಅಥವಾ ಅದರ ಮೇಲ್ವಿಚಾರಣೆ, ನಿಯಂತ್ರಣ ಅಥವಾ ನಿರ್ವಹಣೆಯ ಹೊಣೆಯನ್ನು ಹೊತ್ತಿರುವ ವ್ಯಕ್ತಿ ಎಂದು ಅರ್ಥೈಸತಕ್ಕದ್ದು;

(೪) "ಸಂಸ್ಥೆ" ಎಂದರೆ ಯಾವುದೇ ಅಂಗಡಿ ಮುಂಗಟ್ಟು ಅಥವಾ ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆ ಎಂದು ಅರ್ಥೈಸತಕ್ಕದ್ದು;

(೫) "ಸೂಚಿತ" ಎಂದರೆ ಈ ಅಧಿನಿಯಮದ ಅಡಿಯಲ್ಲಿ ಮಾಡಲಾದ ನಿಯಮಗಳಲ್ಲಿ ಸೂಚಿತ ಎಂದು ಅರ್ಥೈಸತಕ್ಕದ್ದು;

(೬) "ವಾಣಿಜ್ಯ ಸಂಸ್ಥೆ" ಎಂದರೆ ಯಾವುದೇ ಸ್ಥಳದಲ್ಲಿ ಯಾವುದೇ ವ್ಯಾಪಾರ, ವ್ಯವಹಾರ ಅಥವಾ ವೃತ್ತಿಯನ್ನು ನಡೆಸಲಾಗುವ ಅಥವಾ ಸೇವೆಗಳನ್ನು ಒದಗಿಸಲಾಗುವ ಯಾವುದೇ ಆವರಣ ಎಂದು ಅರ್ಥೈಸತಕ್ಕದ್ದು.

೩. ಅಧಿನಿಯಮದ ಅನ್ವಯವನ್ನು ಕೆಲವು ಸಂಸ್ಥೆಗಳಿಗೆ ವಿಸ್ತರಿಸುವ ಅಧಿಕಾರ. ಸರ್ಕಾರವು ಅಧಿಸೂಚನೆಯ ಮೂಲಕ ಈ ಅಧಿನಿಯಮದ ಅನ್ವಯವನ್ನು ಯಾವುದೇ ಸಂಸ್ಥೆಗೆ ಅಥವಾ ಸಂಸ್ಥೆಗಳ ವರ್ಗಕ್ಕೆ ವಿಸ್ತರಿಸಬಹುದು.

೪. ಅಧಿನಿಯಮದ ಅನ್ವಯವನ್ನು ಕೆಲವು ಸಂಸ್ಥೆಗಳಿಗೆ ಅನ್ವಯವಾಗದಂತೆ ಮಾಡುವ ಅಧಿಕಾರ. ಸರ್ಕಾರವು ಅಧಿಸೂಚನೆಯ ಮೂಲಕ ಈ ಅಧಿನಿಯಮದ ಅನ್ವಯವನ್ನು ಯಾವುದೇ ಸಂಸ್ಥೆಗೆ ಅಥವಾ ಸಂಸ್ಥೆಗಳ ವರ್ಗಕ್ಕೆ ಅನ್ವಯವಾಗದಂತೆ ಮಾಡಬಹುದು.

೫. ಕೆಲಸದ ಅವಧಿ. (೧) ಯಾವುದೇ ಕೆಲಸಗಾರನು ಒಂದು ವಾರದಲ್ಲಿ ನಲವತ್ತೆಂಟು ಗಂಟೆಗಳಿಗಿಂತ ಹೆಚ್ಚು ಕೆಲಸ ಮಾಡತಕ್ಕದ್ದಲ್ಲ.

(೨) ಯಾವುದೇ ಕೆಲಸಗಾರನು ಒಂದು ದಿನದಲ್ಲಿ ಒಂಬತ್ತು ಗಂಟೆಗಳಿಗಿಂತ ಹೆಚ್ಚು ಕೆಲಸ ಮಾಡತಕ್ಕದ್ದಲ್ಲ.

(೩) ಯಾವುದೇ ಕೆಲಸಗಾರನು ಒಂದು ದಿನದಲ್ಲಿ ಒಂಬತ್ತು ಗಂಟೆಗಳಿಗಿಂತ ಹೆಚ್ಚು ಕೆಲಸ ಮಾಡಿಸಲು ಅಥವಾ ಕೆಲಸ ಮಾಡಲು ಅನುಮತಿಸಲು ಯಾವುದೇ ಮಾಲೀಕನು ಅಪೇಕ್ಷಿಸಿದರೆ ಅಥವಾ ಅನುಮತಿಸಿದರೆ, ಅಂತಹ ಮಾಲೀಕನು ಅಂತಹ ಕೆಲಸಗಾರನಿಗೆ ಅಂತಹ ಹೆಚ್ಚುವರಿ ಕೆಲಸದ ಅವಧಿಗೆ ಸಾಮಾನ್ಯ ಸಂಬಳದ ಎರಡು ಪಟ್ಟು ಸಂಬಳವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೬. ವಿರಾಮ. ಯಾವುದೇ ಕೆಲಸಗಾರನು ಒಂದು ದಿನದಲ್ಲಿ ಐದು ಗಂಟೆಗಳಿಗಿಂತ ಹೆಚ್ಚು ಕೆಲಸ ಮಾಡತಕ್ಕದ್ದಲ್ಲ, ಅವನಿಗೆ ಒಂದು ಗಂಟೆಯ ವಿರಾಮವನ್ನು ನೀಡದೆ.

೭. ವಾರದ ರಜೆ. ಯಾವುದೇ ಕೆಲಸಗಾರನು ಒಂದು ವಾರದಲ್ಲಿ ಒಂದು ದಿನಕ್ಕಿಂತ ಹೆಚ್ಚು ಕೆಲಸ ಮಾಡತಕ್ಕದ್ದಲ್ಲ, ಅವನಿಗೆ ಒಂದು ದಿನದ ರಜೆಯನ್ನು ನೀಡದೆ.

೮. ಸಂಬಳ ಸಹಿತ ರಜೆ. (೧) ಪ್ರತಿ ಕೆಲಸಗಾರನಿಗೆ ಒಂದು ವರ್ಷದಲ್ಲಿ ಹನ್ನೆರಡು ದಿನಗಳ ಸಂಬಳ ಸಹಿತ ರಜೆಯನ್ನು ನೀಡತಕ್ಕದ್ದು.

(೨) ಸಂಬಳ ಸಹಿತ ರಜೆಯ ಸಂಬಳವನ್ನು ರಜೆಗೆ ಮುಂಚೆ ಪಾವತಿಸತಕ್ಕದ್ದು.

೯. ಅನಾರೋಗ್ಯ ರಜೆ. (೧) ಪ್ರತಿ ಕೆಲಸಗಾರನಿಗೆ ಒಂದು ವರ್ಷದಲ್ಲಿ ಹನ್ನೆರಡು ದಿನಗಳ ಅನಾರೋಗ್ಯ ರಜೆಯನ್ನು ನೀಡತಕ್ಕದ್ದು.

(೨) ಅನಾರೋಗ್ಯ ರಜೆಯ ಸಂಬಳವನ್ನು ರಜೆಗೆ ಮುಂಚೆ ಪಾವತಿಸತಕ್ಕದ್ದು.

೧೦. ಪ್ರಸೂತಿ ರಜೆ. (೧) ಪ್ರತಿ ಮಹಿಳಾ ಕೆಲಸಗಾರಳಿಗೆ ಹೆರಿಗೆಯ ಮೊದಲು ಮತ್ತು ನಂತರ ಒಟ್ಟು ಹನ್ನೆರಡು ವಾರಗಳ ಪ್ರಸೂತಿ ರಜೆಯನ್ನು ನೀಡತಕ್ಕದ್ದು.

(೨) ಪ್ರಸೂತಿ ರಜೆಯ ಸಂಬಳವನ್ನು ರಜೆಗೆ ಮುಂಚೆ ಪಾವತಿಸತಕ್ಕದ್ದು.

೧೧. ಕೆಲಸದ ಸ್ಥಳದಲ್ಲಿ ಸುರಕ್ಷತೆ. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರಿಗೆ ಕೆಲಸದ ಸ್ಥಳದಲ್ಲಿ ಸುರಕ್ಷತೆಯನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೧೨. ಕೆಲಸದ ಸ್ಥಳದಲ್ಲಿ ಆರೋಗ್ಯ. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರಿಗೆ ಕೆಲಸದ ಸ್ಥಳದಲ್ಲಿ ಆರೋಗ್ಯವನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೧೩. ಕೆಲಸದ ಸ್ಥಳದಲ್ಲಿ ಕಲ್ಯಾಣ. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರಿಗೆ ಕೆಲಸದ ಸ್ಥಳದಲ್ಲಿ ಕಲ್ಯಾಣವನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೧೪. ಕೆಲಸಗಾರರ ಪ್ರತಿನಿಧಿಗಳು. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರಿಗೆ ಕೆಲಸಗಾರರ ಪ್ರತಿನಿಧಿಗಳನ್ನು ಆಯ್ಕೆ ಮಾಡಲು ಅವಕಾಶ ನೀಡತಕ್ಕದ್ದು.

೧೫. ಕೆಲಸಗಾರರ ಸಮಿತಿ. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರಿಗೆ ಕೆಲಸಗಾರರ ಸಮಿತಿಯನ್ನು ರಚಿಸಲು ಅವಕಾಶ ನೀಡತಕ್ಕದ್ದು.

೧೬. ಕೆಲಸಗಾರರ ಕುಂದುಕೊರತೆಗಳ ಪರಿಹಾರ. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರಿಗೆ ಕುಂದುಕೊರತೆಗಳ ಪರಿಹಾರಕ್ಕಾಗಿ ಒಂದು ಕಾರ್ಯವಿಧಾನವನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೧೭. ಕೆಲಸಗಾರರ ಶಿಸ್ತು. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರಿಗೆ ಶಿಸ್ತಿನ ಕ್ರಮಗಳನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೧೮. ಕೆಲಸಗಾರರ ವಜಾ. ಪ್ರತಿ ಮಾಲೀಕನು ತನ್ನ ಕೆಲಸಗಾರರನ್ನು ವಜಾ ಮಾಡಲು ಒಂದು ಕಾರ್ಯವಿಧಾನವನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೧೯. ಕೆಲಸಗಾರರ ರಾಜೀನಾಮೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ತನ್ನ ರಾಜೀನಾಮೆಯನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೨೦. ಕೆಲಸಗಾರರ ನಿವೃತ್ತಿ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ತನ್ನ ನಿವೃತ್ತಿಯನ್ನು ಒದಗಿಸತಕ್ಕದ್ದು.

೨೧. ಕೆಲಸಗಾರರ ಮರಣ. ಪ್ರತಿ ಕೆಲಸಗಾರನ ಮರಣದ ನಂತರ ಅವನ ಕುಟುಂಬಕ್ಕೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೨. ಕೆಲಸಗಾರರ ಅಂಗವೈಕಲ್ಯ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಅಂಗವೈಕಲ್ಯಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೩. ಕೆಲಸಗಾರರ ಗಾಯ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಗಾಯಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೪. ಕೆಲಸಗಾರರ ಕಾಯಿಲೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಕಾಯಿಲೆಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೫. ಕೆಲಸಗಾರರ ಸಾವು. ಪ್ರತಿ ಕೆಲಸಗಾರನ ಸಾವಿನ ನಂತರ ಅವನ ಕುಟುಂಬಕ್ಕೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೬. ಕೆಲಸಗಾರರ ಕಾಣೆಯಾಗುವಿಕೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಕಾಣೆಯಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೭. ಕೆಲಸಗಾರರ ಕಳ್ಳತನ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಕಳ್ಳತನಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೮. ಕೆಲಸಗಾರರ ದರೋಡೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ದರೋಡೆಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೨೯. ಕೆಲಸಗಾರರ ಸುಲಿಗೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಸುಲಿಗೆಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೦. ಕೆಲಸಗಾರರ ಅಪಹರಣ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಅಪಹರಣಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೧. ಕೆಲಸಗಾರರ ಒತ್ತೆಯಾಳು. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಒತ್ತೆಯಾಳಾಗಿ ಇರಿಸಿಕೊಂಡರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೨. ಕೆಲಸಗಾರರ ಭಯೋತ್ಪಾದನೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಭಯೋತ್ಪಾದನೆಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೩. ಕೆಲಸಗಾರರ ಯುದ್ಧ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಯುದ್ಧಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೪. ಕೆಲಸಗಾರರ ಅಂತರ್ಯುದ್ಧ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಅಂತರ್ಯುದ್ಧಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೫. ಕೆಲಸಗಾರರ ಪರಮಾಣು ಯುದ್ಧ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಪರಮಾಣು ಯುದ್ಧಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೬. ಕೆಲಸಗಾರರ ಜೈವಿಕ ಯುದ್ಧ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಜೈವಿಕ ಯುದ್ಧಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೭. ಕೆಲಸಗಾರರ ರಾಸಾಯನಿಕ ಯುದ್ಧ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ರಾಸಾಯನಿಕ ಯುದ್ಧಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೮. ಕೆಲಸಗಾರರ ಭೂಕಂಪ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಭೂಕಂಪಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೩೯. ಕೆಲಸಗಾರರ ಪ್ರವಾಹ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಪ್ರವಾಹಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೪೦. ಕೆಲಸಗಾರರ ಬೆಂಕಿ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಬೆಂಕಿಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೪೧. ಕೆಲಸಗಾರರ ಸ್ಫೋಟ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಸ್ಫೋಟಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೪೨. ಕೆಲಸಗಾರರ ವಿಷಪ್ರಾಶನ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ವಿಷಪ್ರಾಶನಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೪೩. ಕೆಲಸಗಾರರ ಆತ್ಮಹತ್ಯೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಆತ್ಮಹತ್ಯೆಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೪೪. ಕೆಲಸಗಾರರ ಕೊಲೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಕೊಲೆಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

೪೫. ಕೆಲಸಗಾರರ ಆತ್ಮಹತ್ಯೆಗೆ ಪ್ರಚೋದನೆ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಆತ್ಮಹತ್ಯೆಗೆ ಪ್ರಚೋದನೆಗೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

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೪೭. ಕೆಲಸಗಾರರ ಆತ್ಮಹತ್ಯೆಗೆ ಸಹಾಯ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಆತ್ಮಹತ್ಯೆಗೆ ಸಹಾಯಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

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೫೧. ಕೆಲಸಗಾರರ ಆತ್ಮಹತ್ಯೆಗೆ ಪ್ರಯತ್ನ. ಪ್ರತಿ ಕೆಲಸಗಾರನು ಆತ್ಮಹತ್ಯೆಗೆ ಪ್ರಯತ್ನಕ್ಕೆ ಒಳಗಾದರೆ ಅವನಿಗೆ ಒಂದು ಮೊತ್ತವನ್ನು ಪಾವತಿಸತಕ್ಕದ್ದು.

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೬೯. ಕೆಲಸಗಾರರ ಆತ್ಮಹತ್ಯೆಗೆ ಪ್ರಯತ್ನ. ಪ್

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الفصل الثاني: نماذج العرض والطلب ٤٧

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Hören

Schreiben

Grammatik

Wortschatz

Lösungen

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Conclusion
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Application for Employment

Please type or print clearly

Name _____

Address _____

Telephone _____

Position Applied For _____

Date _____

Are you employed now? _____

If so, may we contact your present employer? _____

Have you ever been employed by this company? _____

If so, when? _____

Have you ever been convicted of a felony? _____

If so, explain: _____

Education

High School _____

College _____

Graduate School _____

Other _____

Special skills _____

Typing speed _____

Shorthand speed _____

Machines you can operate _____

Languages _____

Military service _____

Rank _____

Hobbies _____

Memberships _____

References

1. _____

2. _____

3. _____

Please list three persons not related to you whom we may contact as references.

Signature _____

I certify that the facts contained in this application are true and complete to the best of my knowledge.

Signature _____

Date _____

Thank you for your interest in our company.

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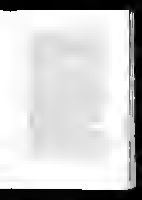

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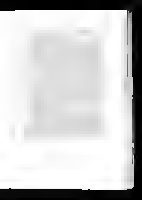

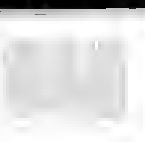

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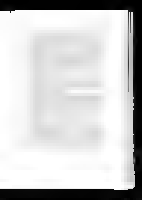

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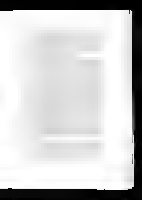

Author Name
Author Name
Author Name

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Preface

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Abbreviations

Introduction

Author
author@email.com
Author
author@email.com
Author
author@email.com

Abstract
abstract abstract abstract

LIVRE CARRÉ DE LINGERIE

Voyage pour toute la famille

Quelques mots du dessus